

# ANDRUGERS GROUP

\$2.50

## THE HARVEST

VOL5-NO. 4

MAY 1984

### MEETING DATE JUNE 2, 1984

10:00 am-1:00 pm Building A, Harper College
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## CLUB OFFICERS

| President—                     | Rob Stewart      | *            |
|--------------------------------|------------------|--------------|
| Vice-<br>President-            | Jim Glore        | 312-843-3215 |
| Treasurer-                     | Jim Murphy       | 312-449-3139 |
| Secretary-                     | Ken Rentfleish   | *            |
| Librarian—                     | Joe Zeinz        | 312-526-0575 |
| Newsletter<br>Editor—          | Terry Tufts      | 312-392-7735 |
| Program<br>Chairman            | Jim Glore        | 312-843-3215 |
| Meetings<br>Co-ordinator—      | George McClarity | 312-359-0283 |
| Beginners SIG<br>Co-ordinator— | Guy Lyle         | 312-359-1458 |

\*24 hr GENERAL INFORMATION NUMBER
312-844-7555

#### CORRECTIONS/CHANGES OF ADDRESS

Corrections/changes of address MUST be sent to the club secretary. Mailings are by bulk presorted third class mail. Any incorrect addresses will usually result in missed issues.

Membership is open to all. Dues are \$24.00 annually with a one time initiation fee of \$5.00 at the time of admission. Membership applications are available from the club Secretary at the meetings or by mail.

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#### HARVEST STAFF

| EDITOR                   | -Terry Tuft               | :s 🔻  |
|--------------------------|---------------------------|-------|
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| Software                 | -Rich McNei               | 1     |
| Beginners-               | -Al Guthrie               | •     |
| Education/Book Reviews-  | -Sheldra Ho               | rwitz |
| SIG News                 | -Ken Falter               | •     |
| Graphics                 | -Pat Richte               | r     |
| Interesting Bits         | -Chris Tuft               | 8     |
| Labels                   | -Loren Aven               | son   |
| GENERAL STAFF            |                           |       |
| Leo Rogers, Bruce Baier. |                           |       |
|                          |                           |       |

#### CLUB ADDRESSES

| CLOB            | ADDKESSES                                                                        |
|-----------------|----------------------------------------------------------------------------------|
| MEMBERSHIP, ETC | NIAUG<br>1271 Dundee Rd,<br>Buffalo Grove, I1,<br>60090                          |
| NEWSLETTER      | Terry Tufts<br>1015 S Ridge Ave,<br>Arlington Hts, I1,<br>60005.<br>312-392-7735 |
| LIBRARIAN       | Joe Zeinz<br>305 Honeysuckle,<br>Island Lake, Il,<br>60042<br>312-526-0575       |
| BULLETIN BOARD  | 312-295-6926 24 hrs<br>SYSOP-Dave<br>& Joel Alpert                               |

#### SUBMITTING ARTICLES

Handwritten articles are acceptable but articles on disk are preferred. Articles on a disk should use one of the following word processors: Easywriter, Applewriter, PIE or Magic Window. Use a 0 left margin and a line length of 47 characters for Easywriter and 41 for all others. Fill and right justify all text. Also supply a hard copy of the article for proof reading purposes. If your article includes a program listing please submit it on disk unless you have a printer that uses carbon film ribbon. All disks will be returned at the meeting unless requested to do otherwise.

## MEMBERS AIDE

The members listed below have volunteered to answer questions from club members who need a "HOTLINE" type answer that can be handled over the telephone. Please try to be brief as a courtesy to them.

| PLEASE NO CALLS at di                        | inner time or afte                | er 10 pm.                                              | <b></b>                             | -tm - m - r                     | **** *** ****                          |
|----------------------------------------------|-----------------------------------|--------------------------------------------------------|-------------------------------------|---------------------------------|----------------------------------------|
| GENERAL                                      | Paul Stadfeld                     | 312-359-2378                                           | P                                   | *Dave Drucker                   | 312-541-2124                           |
| TECH NOTES                                   | ?                                 | ?                                                      | A,I                                 | *daytime<br>Rich Lundeen        | 312-420-8468                           |
|                                              |                                   | •                                                      | M,A,I                               | Paul Stadfeld                   | 312_350_2378                           |
| BULLETIN BOARDS                              | Joel Alpert                       | 312-295-6078                                           | M; <b>A</b> ;I                      | Gıy Lyle<br>Joe Zeinz           | 312-359-1458<br>312-526-0575           |
| COMMUNICATION PACKAG                         | es & modems/teleo                 | OM                                                     | M,A,I                               | Earl Allen                      | 312-837-9259                           |
| Apple Cat II<br>DC Hayes Micromodem          | ?<br>Joel Alpert                  | ?<br>312–295–6078                                      | A,I,P<br>A,I,                       | Ken Nestle<br>Jim Murphy        | 312-620-7745<br>312-449-3139           |
| no nayes ructumouem                          | Tony Antonucci                    | 312-282-8436                                           | A,P,C,<br>8080, 280 Assembler       | Tony Antonucci                  | 312-282-8436                           |
| N. Harra Grantmadan                          | Rich Lundeen                      | 312-420-8468                                           | 8080, 280 Assembler<br>F            | Bob Sullivan                    | 312-282-8436<br>312-383-7785           |
| DC Hayes Smartmodem<br>ASCII Express         | Joel Alpert                       | 312-295-6078                                           | Ç                                   | ?                               | ?                                      |
| -                                            | Tony Antonucci                    | 312-282-8436<br>312-282-8436                           | Logo<br>Pilot                       | ?                               | ž                                      |
| Z-pro<br>Data Capture                        | Tony Antonucci                    | ?                                                      |                                     | •                               | •                                      |
| Visiterm                                     | ?                                 | ?                                                      | SPREADSHEETS                        |                                 | •                                      |
| Source                                       | •                                 | f                                                      | Multiplan                           | ?                               | ?                                      |
| HARD DISKS                                   |                                   | 010 5/1 010/                                           | Microfinesse                        | *Dave Drucker                   | 312-541-2124                           |
| Corvus                                       | *Dave Drucker<br>*davtimes        | 312-541-2124                                           | LogiCalc                            | *daytime number<br>Peter Clarke | 312-545-0974                           |
|                                              | Walt Hopkins                      | 815-459-1769                                           | The Spreadsht/Magi-                 |                                 | 312-677-8787                           |
| Corona                                       | ?                                 | 7                                                      | Incredible Jack                     | Joe Sobel                       | 312–398–1836<br>?                      |
| COMPILERS                                    |                                   |                                                        | VisiCalc                            | Joe Sobel                       | 312-398-1836                           |
| Tasc                                         | Rich McNeil                       | 312-986-0548                                           | VisiCalc                            | Jay Toutenhoofd                 | 312-359-1460                           |
| Expediter                                    | •                                 | •                                                      | OPERATING SYSTEMS                   |                                 | 010 0/0 0015                           |
| DATA BASES                                   | •                                 | 2                                                      | Apple DOS                           | Jim Glore<br>Tony Antonucci     | 312-843-3215<br>312-282-8436           |
| dBase II<br>DB Master                        | Max Rubin                         | 312-674-7209                                           | CPM                                 | Tony Antonucci                  | 312-282-8436                           |
| _                                            | Natalie Alberts                   | 312-381-1530                                           | UCSD P-System                       | *Dave Drucker                   | 312-541-2124                           |
| Data Factory<br>General Manager              | Ken Falter<br>Rich McNeil         | 312-259-6474<br>312-986-0548                           |                                     | *daytime number                 |                                        |
| Infomaster                                   | ?                                 | ?                                                      | PRINTERS                            | Tarres Machae                   | 212_577_7201                           |
| List Hander<br>Versaform                     | ?                                 | Ŷ                                                      | General<br>Apple Dot Matrix         | Terry Tufts<br>David Macaulay   | 312-577-7381<br>312-991-4977           |
| Visifile                                     | <u>?</u>                          | ?                                                      | Diablo                              | Peter Clarke                    | 312-545-0974                           |
| PFS                                          | Byrd Dehinten<br>Rich McNeil      | 312 <del>-998-8</del> 742<br>312 <del>-986-</del> 0548 | IDS<br>Epson                        | Tony Antonucci                  | 3412-282-8436                          |
|                                              |                                   |                                                        | NEC Spinwriter                      | ?                               | ?                                      |
| EDUCATION SOFTWARE                           | Jim Bradshaw                      | 312-881-7000                                           | NEC 8023                            | Bob Steinberg<br>Rich Lundeen   | 312-677-8787<br>312-420-8468           |
| CAMES                                        |                                   | ?                                                      | ProWriter                           | Tom Grisko                      | 312-297-0927                           |
| GRAPHICS                                     | Paul Stadfeld                     | 312-359-2378<br>312-449-3139                           | Okidata                             | Peter Clarke<br>*Dave Drucker   | 312-545-0974<br>312-541-2124           |
| HARDWARE<br>8" disk Drives                   | Jim Murphy<br>Tony Antonucci      | 312-282-8436                                           |                                     | *daytime number                 |                                        |
| ACCOUNTING                                   | •                                 |                                                        | WORDPROCESSORS                      | -                               |                                        |
| The Accountant                               | Walt Hopkins                      | 815-459-1769                                           | Easy Writer                         | Terry Tufts                     | 312-577-7381                           |
| Home Accountant                              | Tom Grisko                        | 312-297-0927                                           | Apple Writer II                     | Ken Falter<br>Rich McNeil       | 312-259-6474<br>312-986-0548           |
| Time is Money RPI                            | Bob Steinberg<br>?                | 312-677-8787<br>?                                      | Format II                           | Bob Steinberg                   | 312-677-8787                           |
| DOCTORUDA ATTO                               | i<br>Antologia                    | 212 420 0440                                           | Gutenberg<br>Letter Perfect         | ?                               | ?                                      |
| BEGINNERS AIDE                               | *Rich Lundeen<br>*Applesoft, DOS, | 312–420–8468<br>Assembler                              | Magic Window                        | Ed Evenson                      | 312-255-3403                           |
|                                              | VisiCalc                          |                                                        | J                                   | Rich Lundeen                    | 312-420-8468<br>312-986-0548           |
| INVESTMENT                                   | John Hoffmann                     | 312-98-0164                                            | ScreenWriter II                     | Rich McNeil<br>Tom Grisko       | 312-27-0927                            |
| INVESTMENT                                   | Jim Bradshaw                      | 312-881-7000                                           | Supertext II                        | ?                               | ?                                      |
| LANGUAGES                                    |                                   |                                                        | Apple Pie/PIE Write<br>Word Handler | S HODKINS                       | 815–459–1769<br>?                      |
| (A)pplesoft, (I)nteg<br>(F)orth, (L)isp, (M) | er, (P)ascal,                     |                                                        | WordStar                            | Peter Clarke                    | 312-545-0974                           |
| (F)orth, (L)isp, (M)                         | achine code,<br>Ted Rosemann      | 312-882-7938                                           |                                     | Tony Antonucci                  | 312-282-8436                           |
| A,I<br>A,I                                   | Mary Rosemann                     | 312-882-7938                                           | GENERAL BUSINESS                    | •                               |                                        |
| P                                            | Herb Schulz                       | 312-968-6927                                           | Stats Plus                          | Ken Falter                      | 312 <del>-</del> 25 <del>9-64</del> 74 |

ADDITIONAL VOLUNTEERS REQUIRED TO FILL OUT THIS MEMBER SERVICE. IF YOU FEEL QUALIFIED IN ONE OF THE SUBJECTS BELOW PLEASE CALL THE EDITOR TO HAVE YOUR NAME ADDED TO THE LIST.

## EDITORIAL

by Terry Tufts

#### **NEW HAPPENINGS**

Well a number of projects got completed this month and several more to go. The Disk Library Index came back from the printer. It's a pretty impressive tome, forty four pages counting the cover. It will be in the mail in a few days as soon as the labels can be printed. Getting labels is usually a simple routine but we had a couple of near mutinies as a result of people trying to print a couple of information fields on the last set of labels. As a result we have retired Data Factory as our official membership data base. The General Manager is now being used and we will see if it is easier to use. In any case our secretary Ken is now retyping the membership into the General Manager. If the past repeats itself, we no doubt will have a month or two of teething problems until we get the gremlins out of the new database. If you find any errors on your mailing label let Ken know right away so we can get them corrected.

#### MORE ON THE NIAUG PMS

This month the Harvest once more will be a theme issue relating to Bulletin Boards and communications. Dave Alpert did a very good job of showing how to use the NIAUG PMS, but there is so much to learn that I am sure that much of what he showed went completely by you as it did me. Fortunately Dave passed on several an articles written by Sandra Brockmann on how to use the PMS in conjunction with the ASCII Express Professional communications program. These articles are very well written and you should find them very easy to follow. They were written specifically for the Apple Bits User Group of Kansas City PMS where Sandra is the System Operator for that bulletin board. Not only is Sandra a fine writer but her enthusiasm for the subject bubbles through, making the article that much more enjoyable to read. Some of the article's examples are specific to the Kansas system, but I am sure you will see the difference once you call the NIAUG system. I left them in purposely because they were good examples and the article would suffer if

· they were removed.

As an added fringe benefit we are enclosing a list of bulletin boards around the country that you can experiment with. This list is courtesy the I/O PORT, the newsletter of the Tulsa Computer Society who did the type setting and PMS Santee, associated with Bill Blue who is author of ASCII EXPRESS, ASCII EXPRESS PROFESSIONAL, and the PMS software used by NIAUG. Happy calling and many happy long distance fees.

#### WE GET QUESTIONS

The executive has gone over the questionaires that are part of the annual membership renewal form. Various officers will be using different forums to try to answer the questions that each of you have asked. I will try to answer some of them here, so pay attention because we will have a test later.

STATEMENT- I would like to meet with users that run a business out of their home.....RESPONSE ....there are quite a few members that are doing just that. You can meet with them in a number of ways:

- 1. Make a request for people to meet with you when the members section of the meeting "Ask Mr. Apple" is held during each meeting.
- 2. Put an Ad in the Harvest, there is no charge, and it helps your Editor fill space with useful club information.
- 3. Consider forming a new Special Interest Group (SIG) that would deal with the total subject and problems associated with a small business run from the home. This can easily be done with the help of the club executive, the Harvest and a little interest in the subject from your fellow members besides yourself. I'll give odds that you can find enough people to form a group and that you find that you don't have to run the group if you don't wish to. Please give it a try, it is being done in other users groups and I believe it would be a very useful addtion to the club and the benefits that we offer.

Statement 2....I would like to obtain back issues of the Harvest....RESPONSE.....This is even easier to do. Just give me a call and

come over and I will dig out the issues I have. I have most issues going back at least 2 years. They are yours for the exorbitant fee of \$1 a piece. The money is welcome and I can use the space.

Statement 3....Would like to more programs in the Harvest....RESPONSE.... I'm not sure what exactly this request is for so lets examine some possibilities. We publish what our readers send us, you are our source for much of the information published. If we are not addressing your needs we may not be getting any to meet your needs. We get many other club newsletters that do have programs of one type or other. I may be passing them over because they don't personally interest me. I can use your guidance on your needs, drop me a line and let me know what you would like to see or better still I will let you read the exchange newsletters and select articles that I should be publishing for the general benefit of us all.

Statement 4.... I would like to make contacts so that questions can be asked outside of the

meetings.....RESPONSE....once more there are four ways to do this.

- 1. Use the "Ask Mr. Apple" section of the meeting to ask someone to meet you.
- 2. Put an AD in the Harvest, the price is right and you will get amazing response.
- 3. Call someone on the "Hotline" concerning the subject that you have an interest or question on. Most of these people will have an answer for you or can refer you to someone who will be able to help you.
- 4. Put a message on the NIAUG PM System, asking for assistance.

If you have questions, thoughts comments about the club let us know and we make sure you get a response. Remember the Harvest is your communication medium and you may be asking a question that may also help someone else as well.

March 14, 1984

Terry Tufts, Editor The Harvest (N.I.A.U.G.) 1015 S. Ridge Ave. Arlington Hts. IL 60005

Re: Worlds fastest Basic Sorter

Dear Terry,

The sort routine listed in the March '84 issue of the Harvest is indeed quick. However it is not a sorter but an alphabetizer. It can't handle numbers or symbols.

The fix is an easy one. The dimension for A in line 60 should be changed to 128 (up from 26 which handles only the uppercase alphabet). The "-64" needs to be eliminated from line 70. The for-next loop in line 80 needs to be changed to 128 (replacing the 26).

Better still, sorting time does not appear to be affected.

Sincerely,

Charlie Harrison

Som he Harrison

Member

#### ELLIS J. NEIBURGER, D.D.S.

1000 North Avenue Waukegan, Illinois 60085

CH 4-0292

4.6.84

Dear Teny

A letter to the ed. For comment regarding

Rob Stewart's DATA Communications. which appeared in 4/84 Harvest.

I disagree with his statement that you must notify Ma Rell that you have a modern. It is NOT Necessary. A few years ego, before the law was changed, this was necessary. Today, you can hook anything that has an FCC Number to your system without permission. This includes moderns, Kmart telephones, answering machines, etc, If you really want to call Ma Bell and the tell her anyway, you will probably receive a

modem what ? reply.

Skip Veiburgei

## Washington Apple Pi



8227 Woodmont Avenue, Suite 201 Bethesda, MD 20814 (301) 654-8060

Harvest Terry Tufts 1015 S. Ridge Avenue Arlington Hots. 60005 ΙL

March 24,1984

Dear Terry:

We would like to be able to offer our 4000 members timely information on events of interest to microcomputer owners in general and to Appletm owners in particular. News of troubles and triumphs of both user groups and individual members, state and local government activities affecting micro owners, problems of ownership, themes and dates of forthcoming meetings (our members do travel a lot!), all would be appreciated, and used in what we hope would be a monthly column of our journal.

I am aware that some of that information appears in the newsletters and journals we receive in exchange for the Washington Apple Pi. Unfortunately much of that information, often received after our deadline and (thanks to the Post Office) sometimes already stale on receipt, is not timely enough for inclusion in the PI.

We will welcome communications both from the Harvest and from individual members. Letters and tearsheets of news stories (please make sure the paper and the date are clearly identified) will both be appreciated. proper credit will be given to the sources. We will not be able to use any items to which we cannot attach the name of a source, or material we may fear to be libelous. We would appreciate your publicizing this request among your members, and we are eager to reciprocate for your cooperation in a suitable manner.

The material should be sent to:

Bob Kosciesza c/o Washington Apple Pi 8227 Woodmont Ave., Suite 201 Bethesda MD 20902

The deadline for receipt of the material is 25th of each month.

#### OPEN COMMENTS ON PETER McWILLIAMS IN THE TRIBUNE

Subject:

Newspaper column "Personal computers" Chicago Tribune, Sunday, March 25, 1984

Peter used the headline "Three programs for the draft-bored" and reviewed three different programs. Each program was for a different purpose. He designed identified these purposes as drafting reports, diagrams and dBase programs. It is only the first of these that I would like to address here.

It is no secret to anyone who has read a few of Peter McWilliams' articles that he has no love for Apple Computer. Other than the fact that he sometimes allows this dislike to creep into his articles, and sometimes approaches this personal dislike with open hostility, he still presents a lot of computer oriented information in a reasonably pleasant writing style. Suffice it to say that I reading his column and usually personal (emotional?) overlook his anti-Apple comments.

All that aside, I felt that he has now allowed, over a long period of time, a degree of tunnel vision to develop. Could it be possible that just because it comes from Apple it must therefore be either ignored or be put down?

Let's assume that for this article the decision was to ignore. Peter reviewed a software package called COMPARE II which allows you to compare a second, third, fourth (etc) draft of whatever you might be writing to a previous draft to keep track of the most recent changes and to compare the differences.

Granted, this program somehow points out the differences between the two drafts, but since the program costs \$145.00, what would we who already own Apple Writer II gain by buying it? (Has Peter ever reviewed this program and since it is an Apple product, if he did review it, did he have anything positive to say about it)?

Consider the fact that we can save as many drafts as we want on disk(s) and them at random for review and modification to our hearts' content. But, you ask, how can we modify a previous draft and still be able to compare the latest revision to the unrevised copy? The obvious answer would be to print a copy of the draft LOADed from disk and compare your work on the monitor to the printed copy. A less obvious answer, and one that seems to be seldom used, is to use the Split Screen feature of Apple Writer ([Y]). With Split Screen we can make revisions to the work copy while the unchanged reference copy is displayed on the same screen.

We could now kick around the limitations of this feature, but, I'm sure you will agree that all programs have their limitations. I'm sure that COMPARE II has some. The point I am trying to make is Apple Writer has been around for a while and most of us don't use it to the fullest. If we jumped at the opportunity of spending \$145.00 every time a new word processing program is offered we would soon run out of storage space and would succeeded in duplicating various have features, repeatedly. Further, since we have already made an investment in a word processing package, additional investments (by the hundreds of dollars) isn't the only alternative for improving our processing capabilities.

If I must close by making a point, let it be this; whatever programs you might use, go back to the manuals from time to time, you might discover some untapped you may have processing power that over-looked. Also, keep reading Peter McWilliams' column. Who knows, maybe he use one of the word processing programs that he reviews to finally say something positive about Apple and its' products.

#### Pres Says....

Busy, busy, busy. I didn't know how busy I could be.

Dues. Dues will remain at the same level (\$24.00 per year). At the request of the Treasurer and Secretary, we are changing to a MONTHLY membership program. This will still mean that all current members will still renew in January, but with the projected increase in members we expect there to be significant spreading of the job renewal throughout the other 11 months. A FULL FAMILY MEMBERSHIP will remain \$24.00 but will now be for 12 months, not 1 year. FULL FAMILY MEMBERSHIP will entitle the member family to all rights of membership, and 1 VOTE in elections. Full members are located within the area around our general meeting location, and therefore part of their dues help offset the cost of the general meeting facilities.

The officers have also voted to establish additional class of membership. ASSOCIATE FAMILY MEMBERSHIP dues will be \$18.00 per year (12 months as above). They will have all rights of membership EXCEPT they will have NO VOTING RIGHTS. Additionally, ASSOCIATE memberships will Ъe available outside an extended Chicagoland area. We have determined members in counties within approximately 60 miles of Palatine Illinois will require FULL membership. Outside of these counties, only ASSOCIATE membership will be allowed. This will reduce the cost to members who cannot general meetings under normal circumstances. Unlike CALL APPLE, we do wish to charge our members for facilities if they will probably never be able to use them. If they can, on occassion attend, great!

Suburban. A11 the officers, myself included. are interested in I think that this concept should be looked at very closely. The UG has the necessary funds and cash flow to additional major pay for meeting facilities. Initially I see only 1 and possibly insurmountable, major, problem with this proposal. Who among you would be willing to coordinate the Sub-Group? The current volunteers have Anyone who believes they may qualify for an ASSOCIATE membership, please contact Murphy for verification. If you qualify, your existing membership will be extended 3 months.

Thirdly, we have established an ADDITIONAL NEWSLETTER SUBSCRIPTION. This available to existing ASSOCIATE members only! The address need not be the same, but the subscription MUST BE SENT TO AN IMMEDIATE FAMILY This subscription will MEMBER. prorated to coincide with the original MEMBERSHIP FAMILY period. interested, please contact our TREASURER, Jim Murphy, at the next general meeting for the appropriate form and charge.

The MACINTOSH SIG is forming. See the back cover for details.

We would like to talk to anyone with an APPLE III, regarding the 'Apples in a meeting and also establishment. Contact Jim Glore with any questions or suggestions. We also would like to hear from anyone willing to discuss their III at a general meeting, or at a III Beginners SIG.

We have got to have someone to coordinate the ANNUAL PROGRAM CONTEST. It will not be very time intensive, we just need someone who will be a focal point for the other volunteers.

I think the BY-LAWS will be out next month. With any luck, the POLICY Manual at the same time.

A number of members have suggested that NIAUG establish sub-groups to general meetings in other locations. IE:North Shore; Indiana; Southwest all we can do to manage I general meeting month. We will continue to perform all the other duties but we must have a SUB-GROUP COORDINATOR to arrange and plan other general meetings. for each separate meeting coordinator Please step forward volunteer. We can give you everything you will have to do, only you will have to be the one to do the work. Figure about 4 hours per month outside of the

monthly Planning Meeting, plus the time at the remote meeting.

Any comments or suggestions are always welcome. We can't read your minds. You have to take the time to tell us.

Rob Stewart, CDP President

#### For Beginners Only - PMS

by Sandra Brockmann

THE APPLE BITS USER GROUP OF KANSAS CITY
P M S

PMS stands for 'People's Message System. It is a bulletin board system designed for access through the telephone lines. On this system a caller can send and receive mail both public and private. A caller can'download' feature articles, lists of other message systems, programs or whatever else happens to be on the system at the time. A caller can also 'upload' any type of ASCII based files directly to the system.

The following information has been taken directly from the ABUG PMS and is printedhere to 1) assist any new callers to the system and to 2) re-fresh the memories of those of us who have been on ABUG PMS for awhile.

For new users: COMMAND? is the prompt you get on PMS - the character or characters following COMMAND are the ones you would type to receive the information in that file.

COMMAND? ?

System Commands

\* \* \* \* \*

- E = Enter a message into system.
- F = Features, articles, excerpts.
- G = Goodbye. Leave system. (hangup)
- H = Help with various functions.
- I = Information about system.
- K = Kill a message from the files.
- M = Message alert. Messages for you?

- N = News -- System news.
- Q = Quickscan of non-pvt msg headers.
- QP = Quickscan of all msg headers.
- R = Read messages on bulletin board.
- S = Scan of non-pvt msg headers.
- SP = Scan of all message headers.
- SR = Selective message retrieval.
- T = Time, date and connect time.
- U = User modifiable system functions.
- X = eXpert user mode. (on/off toggle)
- Z = Continue message entry after abort
- ? = Prints list of commands.
- \* = Flagged message memory retrieval.

A14 = ABUG meeting

Al3 = Gallimaufry

All = Local MODEMS

TEST = Modem test loop

GENERAL14 = Download

GENERAL15 = Upload

NEWCALL = File for the new user

#### COMMAND? NEWCALL

Welcome to ABUG PMS, Kansas City! The NEWCALL file is designed to help those of you who are not familiar with the operation of PMS. Your time on PMS will be used more efficiently if you take note of the many shortcuts available on the system. This file also provides the answers to the most frequently asked PMS questions. For further HELP type H at the Command level...

#### READING MESSAGES ON THE SYSTEM:

There may be as many as 90 messages on the system. Some are private and cannot be read unless they are addressed to you. The public messages can be read by anyone.

At the Command level:

- R displays range of message numbers
- R#+ (#=first msg. # on system) allows you to read thru' all the public messages. (R15226+)
- RP#+ lets you read all the public msgs.
  on the system and shows you the
  headers of the private messages
  ...where # is the number of the
  first msg. on the system (RP16663+)

- Sl scans thru' all public msg. headers starting with the first msg.
- S99999 scans thru' all public msg. headers starting with last msg. on system
- SP1 scans thru' all message headers starting with the first message
- SP99999 scans thru' all message headers on the system starting with the last message
- QS1 'quickly scans' thru' all public msg. headers starting with the first message on system
- QS99999 'quickly scans' thru' all public msg. headers starting with the last message on the system
- QP1 'quickly scans' thru' all msg. headers on the system starting with the first message
- QP99999 'quickly scans' thru' all msg. headers on the system starting with the last message

When SCANNING messages with S or Q and you see a message you are interested in reading, type an

---> R <---

as you read the header.

This will FLAG the message with an

\*. When finished scanning, type an

---> \* <---

and the flagged messages will be read to you in sequence.

#### REPLYING TO MESSAGES:

When you see the MORE-- prompt at the end of a message, typing R will allow you to reply to the SENDER of that message. You fill in the SUBJECT: . The TO: and FROM: are filled in for you by PMS. Typing A at the MORE prompt will allow you to re-read the message.

When you want to REPLY to a message addressed to you, hitting a CARRIAGE RETURN at the SUBJ: prompt will cause the program to add an R/ to the existing subj. heading. The subject heading cannot be longer than 30 characters.

#### KILL THIS MESSAGE (Y/N/A/U):

The above prompts are displayed after you read a message addressed to you.

A=read this message AGAIN
N=NO, do not delete this message
Y=YES, remove this message
U=UNMARK this message so it won't
be in my message file when I sign
on the system again. U puts a !
before your name in the message
header, indicating you want
others to see the message.

#### DO YOU HAVE A REPLY (Y/N):

The (Y/N) prompt is displayed right after you finish with Y/N/A/U(above).

N=answers NO and takes you on to your next msg. (or Command level) Y=indicates you want to answer the message. Here you are greeted with the SUBJ: header at which point you can either type in a new subject or hit CARRIAGE RETURN which will add the R/ to the existing subject header.

Typing SR; followed by a name or a subject or a date will retrieve the specific messages from the system.

SR;APPLEWRITER SR;TOM

<sup>-&</sup>gt; ? <- at the Command level will display a list of PMS commands

<sup>-&</sup>gt; X <- at any level EXITS you back to the Command level

<sup>-&</sup>gt; K <- will KILL your participation in any level and take you to the next logical operation during message reading K will jump you to the next message

<sup>-&</sup>gt; SR; xxxxxx <- SELECTIVE RETRIEVAL

<sup>-&</sup>gt; 0;xxxx <--

Typing 0 at the Command level will take you to the OTHER SYSTEMS LIST. The O list is very long. If you want to view only the PMS numbers on the OTHER SYSTEMS LIST you can retrieve those numbers by typing O; PMS at the Command level. Any other string can be used for retrieval of selective material. 0;(816) 0;(913) 0;ABBS

#### ENTERING MESSAGES

At the Command level, typing E will let you ENTER a message. You will be asked to fill in TO: and SUBJ: . The FROM: is filled in by the program. Presented with line # 1, you begin typing until the system indicates 'end of line' with a beep. A CARRIAGE RETURN takes you to the next line . . . and so on. After the message is entered a RETURN will display message entry prompts.

A=ABORT message C=CONTINUE entry of message D=DELETE line E=EDIT line H=HELP with message entry functions I=INSERT a blank line L=LIST lines (LN list, no line #'s) S=SAVE completed message to disk W=reWRITE an old message

#### DOT COMMANDS

Any of the above commands can be entered as dot (.) commands on a new line in the message being written...

- .L5 will list message starting with line #5
- .LN will list the message without line numbers
- .D6 will delete line 6.
- .E4 will allow you to edit line 4 (/old way/new way/) (C/R) (C/R)
- .S will allow you to SAVE/SEND the message

LOCK AND LOCX

After typing S to SAVE/SEND your message, you are presented with this:

Password (4 Chrs. max.). If you

want the message to be a PUBLIC message type any four characters and the msg. is saved.

#### TO SEND A PRIVATE MESSAGE:

LOCK will lock your message. It can be read only by the person to whom it is addressed. Do this:

Password(4Chrs.max.)you type: LOCK Password(4Chrs.max.)you type: 4 chrs.

LOCX will also lock your message. The message can be read by

- 1. the person to whom it is addressed IF he has signed on with his PMS
- 2. any person knowing the exact four characters you used when LOCKing this message.

Do this:

Password(4Chrs.max.) you type:LOCX Password(4Chrs.max.) you type:4 chars.

#### TALK

If you have a question, or need special help, you can, at the Command level, type TALK. If the sysop is available to answer questions she will respond to the command. This option should not be used for casual afternoon conversation (as it ties up the system)...if the sysop does not respond to the command after a try or two, write your question in COMMENTS when you sign off PMS.

I hope this revised version of NEWCALL is helpful to you all. If I have missed any important commands, please feel free to leave me a COMMENT at sign off and I will try to make additions to the file.

This system is run by and supported by ->THE APPLE BITS USER GROUP OF K.C. <-

#### COMMAND? II

#### -->> System modifiers

A = Apple 40/64 column mode. (toggle)

C = Case switch. UPPER/lower (toggle)
CS = Clear screen. Type char or N=none.

D = Duplex switch. Full/half (toggle)

L = Line feed switch. On/off

N = Nulls. Set as required (0,100)

P = Prompt. Change current sys prompt.

T = Video/Printer term mode. (toggle)

PAR = Set word length/parity/stop bits STAT = display current system status.

#### COMMAND? F

\* FEATURES \* Updated March 18,1984

#### \*-Features Updated Regularly

| Author/Article              | Туре | This      |
|-----------------------------|------|-----------|
| 1/8th Scale Racing          |      | A15       |
| FBO-Copy II Plus            |      | A12       |
| ABUG Seminars               |      | <b>A8</b> |
| More Black Market Macs      |      | A22       |
| For Sale *                  |      | A21       |
| Doms-Dear Apple             |      | A20       |
| Compuserve Index N-Z        |      | A19       |
| MO. Driver's Test-Humor     |      | A18       |
| Int. Apple Core (Monthly) * | •    | A17       |
| Byers-Epson Linefeed Fix    |      | A16       |
| Apple Bits Meeting *        |      | A14       |
| Gallimaufry (Sysop Col. #8) | *    | A13       |
| Modems in the K.C. Area *   |      | A11       |
| Fix for Applesoft Renumber  |      | A10       |
| Black Market Macs           |      | A9        |
| Vanderpool-Printer Ctrl Cod | les  | A7        |
| Apple Seizure               |      | A3        |
| Epson WordStar Patch        |      | A2        |
| Brockmann-Uploading on PMS  |      | Al .      |
|                             |      | *         |

#### COMMAND? N

#### Last update of ...

| DOWNLOAD  | (General) | 7-Jan-84  |
|-----------|-----------|-----------|
| FEATURES  | (F)       | 18-Mar-84 |
| CATETMAIN | PPV (ATS) | 24-Mar-84 |

#### SYSTEM NEWS March 17, 1984

Next Meeting:

Apple Bits...April 10, 1984 Featuring PRODOS.

----> NEWCALL is updated. New and old users of PMS should all take the time to read NEWCALL!

How to Join the Apple Bits User Group:

- 1. Make check payable to ABUG
- 2. Send check (\$20.00) to: ABUG

% S. Brockmann

51 East 54th St.

K.C., Mo. 64112

- 3. Indicate kind of computer
- 4. Is membership NEW or RENEW ?

#### ID INFORMATION IS AT THE END OF NEWS!

#### MODEMS LIST TYPE All

Personal thanks to Tom Byers and the Hoffmans for all the help they have given me at our monthly meetings.

Plans are being made for a some of the club to attend APPLE/IBM FEST, May 3-6 in Chicago. Train fare is \$96 RT. If you are interested please let the sysop know...we are tentatively planning to leave on the 6:55 (ish) a.m. train on Friday morning, May 4.

FEATURES—Features an IAC column which will be updated monthly. ABUG is a club member of the IAC. Individual memberships are now welcomed by the IAC (International Apple Core).

Type A17

SEMINARS - typing A8 at the Command level will introduce you to the new series of seminars offered by ABUG. These seminars are being offered by club members who will donate their time and expertise to give others an in-depth look at various programs.

ABUG PMS has only ONE phone line! It is true that we have two telephone numbers. 523-0304 is our DIRECT line. 341-3502 is call forwarded to PMS thanks to the generosity of Beatty Electronics.

#### SYSOP COLUMN

Type Al3 for the sysop column on programming tips, Apple information, new products, good companies . . . contributed ...and ... non-contributed various and sundry items of interest.

#### LOCAL STORES TAKE NOTE !

It is the policy of the Apple Bits
User Group to have club members
demonstrate computer products at our
monthly meetings - we feel that by
having a 'real user' demonstrate a
product we are giving a more realistic
overview of that product. If you, as
a local store, wish to have software
or hardware demonstrated please contact
an ABUG board member (numbers
and names are found in the newsletter)
or leave the SYSOP a message on PMS.

#### DO OUR ABUG MEETINGS SERVE YOU?

Dennis Doms is the ABUG Member at Large - he is in charge of scheduling the speakers for each meeting and he needs to know your main areas of interest. If YOU have a piece of software you would like to share with the club - or if you are particularly knowledgeable in some computer related area please leave Dennis a message in the main message file!

(NOTE)\* We clean up MRI after each monthly meeting - we stack the chairs, mop the floor and wipe the fingerprints off the door! We clean the coffee pot, collect the trash and put the entire room back in order. Bill Jellison, a member, who happens to work at MRI, has graciously co-ordinated this clean-up (which means he has done most of it himself).

Do not volunteer! Just pitch in and help - your kindness will be appreciated.....

PMS has, on the average, around 60 callers a day. Spend as much time as you need to on the system but please remember that others are on auto-dial waiting their turn! There are still only 24 hours in a day and the system is running full round the clock!

EVERY MONTH, AT THE ABUG MEETING, WE SELL:

#### USER ID'S

User ID requests will be taken into consideration from any users of this system. ABUG members will have priority in receiving ID's. Others will be based on 1) an 'as available basis and 2) note will be taken of the care and consideration with which you have used this system in the recent past. NOTE-the number of available ID's are limited so if you are not an habitual user of the system your ID will be re-assigned to another user. Habitual, in this case, refers to at least once a week.

#### REQUESTS FOR USER I.D. S-INSTRUCTIONS

If you are an Apple Bits User Group member, leave the following information in the COMMENTS file when you log off PMS:

- 1. NAME
- 2. ADDRESS
- 3. ZIP AND PHONE NUMBER
- 4. 4 LETTER PASSWORD (which password you will need to unlock your ID message)

If you are not an ABUG member please send the above information to the SYSOP via the US Mail.

> ABUG-SYSOP % S. Brockmann 51 East 54th St. K.C., Mo. 64112

After processing the above information I will leave you your ID in a message which will be locked with your four letter password! You must know that password to unlock and read the message. If, for any reason, an ID cannot be issued at this time, I will leave you a message explaining why.

#### Only ONE ID per family!

Please use the system for a month or so before you ask for an ID...too many of our callers ask for an ID, have it issued and never come back to 'collect it'!

This Peoples' Message System is a a service of the Apple Bits User Group of Kansas City.

> HAPPY COMPUTING AND PRODUCTIVE PROGRAMMING AND **ENJOY PMS** 1

#### COMMAND?

You must specify H; followed by the command you want help with. Example: H;all, or H;e etc. Here are the categories you have to choose from:

| Help on:        | Type:    |  |
|-----------------|----------|--|
| System controls | H;ctrls  |  |
| System commands | H; cmnds |  |
| Message entry   | H; enter |  |
| Entire helpfile | H:a11    |  |

The preceding commands START reading at the specified point and continue to the end of the file. When you've read enough, just type 'K' to abort.

Other commands you can get help on are:

B,E,G,H,K,M,O,Q,R,S,SR,T,U,X,? and \*

#### COMMAND? I ---> General Information

This system is a service of the Apple Bits User Group of Kansas City.

Apple Bits meets the second Tuesday of each month at the Mag Hall, on the grounds of the Midwest Research Institute. The regular meeting starts at 7 P.M. and a group of new users meets at 6 P.M. Everyone is welcome attend the meetings and information about joining may be obtained at the meeting.

More info may be obtained by typing 'MEETING' from the command level.

----> System Information

This system consists of a 48k Apple ][ computer with the addition of several machine language routines

added in an EPROM to support nonstandard functions and to increase program efficiency. The Associates Micromodem card hardware is used to support the interface between Ma bell and the computer. micromodem software, however, is not Instead, a very unique machine language I/O system has been developed specifically to support this type of software. It allows an intelligent input/output control system foolproof carrier detect status. prevents the system from ever getting "confused" or losing data as a result of lost carrier or caller abuse.

Time and date are automatically supported by a Mountain Hardware Clock card. This device has proven to be very reliable and accurate. It provides the necessary login time and date, time since logged on, time since last keypress and checks to see if your maximum time per call has been exceeded.

Disk storage in this particular implementation is supported by three Apple 5.25" drives, operating under Apple DOS 3.3.

#### ----> Program information

The main bulletin board program is written mostly in Applesoft basic, and part in machine language, where speed or total system control is required. Most of the machine language routines are on EPROM or additional RAM card, while others are "mapped" into "free" memory locations some of which even trade off with each other to utilize to the fullest, a very limited workspace. This is all done very quickly and is completely invisible to the user. The main program is roughly 24k of BASIC code with an additional 3k of 6502 machine code in support routines.

#### ----> Software Availability

This software was designed and implemented by Bill Blue and is

available for others to operate. Contact PMS Santee, CA, the head - quarters system at 1-619-561-7277.

----> System Hours

This system is online 24 hours a day at (816)523-0304 . . . except during storms when lightning might damage the system.

Mail may be addressed to:

SANDY BROCKMANN SYSOP-ABUG PMS 51 EAST 54TH ST. KANSAS CITY, MO. 64112

Please include a SASE if you would like a reply by return mail.

#### PMS - THE PEOPLE'S MESSAGE SYSTEM

Part 2 by Sandra Brockmann
Although PMS is an extremely friendly
program to use there are areas within the program that give all of us
problems from time to time! For the
old and the new user UPLOAD seems to
be a major problem. Either we don't
know it exists or we don't know what
to do with it once we find it. What
follows is a short lesson, with very
explicit instructions, on how UPLOAD.

1. You see COMMAND 2. You type GENERAL

3. You see PLEASE STAND BY
4. You see WHICH PROGRAM #

('M FOR MENU')

5. You type M 6. You see 13

13 OPERATION USERID
14 OPERATION DOWNLOAD

15 OPERATION UPLOAD

'EXIT' TO END
'MESSAGE' TO RESUME
BULLETIN BOARD

7. You see WHICH DO YOU WANT
8. You type 15
9. You see WELCOME TO OPERATION
UPLOAD
WOULD YOU LIKE INSTRUCTIONS

#### 10. You type N(FOR NO)

(If we were to read the instructions we would learn that UPLOAD allows the PMS user to send files/programs/whatever to PMS! These files are then captured on disk and can used by the System Operator (SYSOP) in the feature section or the DOWNLOAD section of the system - or you might want to send a file to the SYSOP directly - this is the way to do it!

An UPLOADED file can be no longer than 800 lines and no line can contain more than 160 characters. A message should be left in the main message system telling the SYSOP what you have UPLOADED and why. The commands you use are:

.START (to start uploading)
.SAVE (to save your file)
.ABORT (aborts the effort)
FRE (space on disk)
END (done!)

## DO THIS TO TYPE DIRECTLY FROM KEYBOARD INTO UPLOAD

11. You see COMMAND 12. You type .START

13. You see DO YOU NEED A PROMPT?

14. You type Y(YES)

DEFAULT IS ?
C/R TO ACCEPT, OR TYPE
ASCII VALUE OR CHARACTER OF YOUR CHOICE.

16. You decide you like the question mark as a prompt and you hit the carriage return

17. You see READY

18. You see ?

19. You start typing whatever you want the system to receive from you. At each line you will be prompted by a question mark and when you are finished, at the final?......

20. You type .SAVE

21. You see WHAT NAME TO SAVE UNDER

22. You type FILENAME

23. You see SAVING FILE TO DISK ... # LINES SAVED

24. You see COMMAND? You type END 25. You type MESSAGE to exit upload!

## DO THIS TO UPLOAD A FILE ON DISK THRU AEPRO

26. Repeat steps 11-17 above

27. At the prompt(?) do a CTRL Q

28. You type S(SEND)

29. You see FILENAME

30. You type NAME OF FILE ON DISK

31. You see (S)TANDARD/(P)ROTOCOL

32. You type S
33. You see (L)INE OR (C)HARACTER

34. You type L

35. You see PROMPT

36. You type

37. Your file is now being upload to PMS

?

38. When it is completed-at the prompt

39. You type .SAVE

40. You hit RETURN You type END

41. You type MESSAGE to exit upload

(Now we all should know how to UPLOAD to PMS. If you want to try this sometime you should know that it is very easy - and we can always use good programs or good articles for PMS! So find some good files and send them along and next month I will teach us all how to DOWNLOAD everything that we have now UPLOADED! If you need some extended time to learn PMS and to experiment with the system, the hours from 9:00 a.m. to 10:30 a.m. are generally quiet ones on the system...and if you have something really important to UPLOAD please have a copy of it on disk. Tonight when a fuse in the house blew out I lost half of this article, the person UPLOADING a great article got hosed, and the world just stopped for a few horrible minutes!)

> Sandra Brockmann Sysop

#### FOR BEGINNERS ONLY - ASCII EXPRESS "THE PROFESSIONAL" - PART 1

by Sandra Brockmann (If you think, like I thought, that your bare Apple ][ plus is enough to keep your brain busy forever you are right! if you are like some of the rest of us your bare Apple has just whetted your appetite for more and more and more. Soon enough you have your first new card in your APPLE and that gives you the chance to pop the top off your APPLE where you explore the motherboard and the inner workings of the computer. Then it is another card and another - and soon the slots are full and you are wondering when you are going to break down and buy some sort of peripheral device for more And, perhaps, you have (with cards. great fear and trembling) finally drilled your in case for hole an APPLE uppercase/lowercase switch. applications go on and on and on. The wonder! of it . . . the joy! of it . . . knowing that it will never cease . . . knowing that manufacturers are scurrying to supply APPLE lovers with things we have yet to dream of buying! I was an innocent. APPLE owner once. Until I went to an ABUG beginners meeting, that is. I had a bare Apple once! Until I went to an ABUG beginners meeting! There it was hinted at. There it was discussed.

There I realized the monumental importance of SLOT 2.

If you think that playing 27 holes of golf in a day defies all logic, if you can't understand someone spending the time putting a model together, if you think spending hours on a grassy field chasing a pigskin covered ball is a waste of time judge not, until you fill slot 2! Once slot 2 is filled - once your computer table is filled with new phone wires and a little black modem box - once your charge account is switched from the local clothing store to the local computer paper store - you will understand what true enjoyment can come from spending incredibly long hours doing something just for the pure FUN of it.

Don't mention my name. Just ask around. Go to a beginners meeting and talk to Tom Vanderpool . . . mention 1200 baud to

Wood Dickinson or Keith Savastano, or to the phrases 'AEPRO' and Drop Tom. 'Compuserve' and 'auto-answer' at your next computer gathering . . . and watch the eyes around you get glazed over little knowing smirks and watch the smiles . . . watch the yawns struggling to get out from the sleepy modem user's mouths!

Don't get a modem. Don't get ASCII PRO! You will fall in love all over again. If you think (and your family thinks) you and your APPLE are inseparable already just wait until some modem user convinces you that you NEED at modem. You will be truly wedded to your computer room - and the phone system - and to paper purchasing and to the incredibly fascinating, stimulating, scintillating enervating world of communicating with the world, via your APPLE.)

> For the purpose of this article we will assume a Hayes Micromodem II board plugged into SLOT 2 of your APPLE, connected to the Haves Microcoupler, connected to a telephone line along with AEPRO in DRIVE l and an initialized disk in DRIVE 2 or initialized disk ready to replace the AEPRO program in DRIVE 1 (if you only have one drive). READY:

1. Boot up your system with the SYSTEM MASTER and run COPYA.

Use it to make a copy or two of Put away your system master and your AEPRO original and boot up your system with a copy of AEPRO.

- 2. Answer the question concerning upper and lower case with a Y or a N depending on your own system.
- 3. Select a number from 1-9 corresponding with your modem type.
- 4. Select a number corresponding to the SLOT in which your modem card is plugged (in my case it is slot 2).
- 5. Hit return

- 1. Type D(dial) you will see 'number?'
- 2. Type 341-3502 hit return3. You will see: AE: Dialing: 341-3502

AE: Waiting to connect .

4. When the connection is made you will see:

AE:Term

GO: NOW YOU ARE CONNECTED TO APPLE BITS PMS

- 1. Hit return
- You will see
   PMS Apple Bits, Kansas City, Mo.
- 3. USERID (N=NONE):type N

if you don't have an ID on PMS.
At the next prompt type

Name City State

Telephone #

- 4. If all of the information entered is correct type Y(yes)
  5. You will see:
- Loggi:

Logging caller # and the

Type "N" for System News
Type "?" for Commands

- 6. Just for now, so you can get some idea how people use the system to send messages to each other, at the COMMAND level type R and hit return.
- 7. You will see the numbers of the messages on the ABUG system in ( )'s.
- 8. Type the # corresponding to the number of the first message, follow the number with the + sign, hit return
- 9. Mail to and from PMS (People's Message System) users will scroll by!
- 10. When you want to interrupt your reading of a message and go on to the next one just hit K.ll. Hit the X to exit out of reading messages entirely. X will almost always, in PMS, put you back at the COMMAND level at which point you can select other PMS options.

- 12. This time, at the COMMAND level, type OFF; N (which means you are signing off the system with N(No) comments to the system operator (sysop)).
- 13. Your connection should now be terminated and you are ready to enter:

THE EDITOR OF AEPRO

- 1. Type Y to enter the EDITOR mode.
- 2. The editor is made up of commands which always start with a period (.).
  - .c clear buffer
  - .d delete lines
  - .e edit line
  - .f free space/buffer status
  - •g get (filename) from disk
  - .h display the help menu
  - .i insert lines
  - .1 list lines
  - .m set right margin
  - .o send to printer
  - .p put (filename) in buffer to

disk-

- .r reset to maximum memory
- .s string search
- .x exit editor
- . search for next occurrence
- 3. Let's simply learn by doing it! It's easier that way!!

a. Hit .1(list lines) and watch the lines captured in your AEPRO buffer scroll by. If you want to stop a minute and read the text just hit the space bar. To

start the scrolling of lines again hit the space bar again. When you have seen enough lines go by get out of the .l(list lines) mode by hitting

return

Practice

.1(ing) and stopping with the space bar ... to go faster tap the right arrow key a few times, to slow down hit the left arrow key

a few times. If we .14 we start listing with line 4. If we .167 we start listing with line 67. Return gets us out of .1 ! b. Hit .d(delete)0,9 and return and we have lines 0-9. .l(list) again and our first line is now what was line #10 a minute ago. Hit return and we ready to .d(delete) are This time .d5,67. again. A big chuck of lines have (if deleted remembered hit to return to complete the transaction). If you .1 again you can start listing at any point. Note that each time we delete lines the lines are renumbered. So you can't be tricky and decide to delete lines 4,78,187 and 209. AEPRO won't let you. You delete using the lines between two numbers. coma means 'including all the numbers inbetween'!

disk) followed by filename drive and designation (i.e. .pmodem,d2 will put all the stuff in your buffer on the disk in drive 2 under filename modem). the only have one drive you make certain your AEPRO disk is beside the computer somewhere and your blank but initialized disk is in drive 1 and type .pmodem,dl and that file will go to the disk on drive one.

c. Hit .p(put filename to

Hit .cy(clear the buffer? yes) followed by a return and your

buffer will be empty. To check this out just .1 and will see you have listed nothing.

e: Hit .g(get filename from disk) followed by the filename drive and designation (i.e. .gmodem,d2 will get you the file called modem from your disk in drive 2).

.P(PUT) AND .G(GET) ARE THE PARALLELS OF OUR APPLE COMMON COMMANDS - SAVE AND LOAD.

f. Hit .e(edit line) and you can play with any line the number of which you designate after the (i.e. .e5 will allow you to edit line 5). There are special characters which we can use in editing lines to move around, they are:

> 1) ctrl A - moves cursor left one word

> 2) ctrl F - moves cursor right one word

> 3) ctrl S - moves cursor left one character

> 4) ctrl D - moves cursor right one character

> 5) ctrl X - moves cursor to beginning of line

> 6) ctrl C - moves cursor to end of line

> 7) ctrl P - prefixes the

of insertion а character into text

8) ctrl G - gobbles up the character under the cursor

9) H - deletes ctrl character to left of cursor

R - recalls 10) ctrl original line if you've mucked it up

11) ctrl V - toggles editing insert mode

12) ctr1 Z - wonderful zaps the entire line (quickly)

To exit the edit line mode hit return.

g. .f(free space/buffer status) gives you the current total number of characters in the buffer, as well as the number of characters which remain

h. .h(help) returns you to the editor command menu

i. .i(insert lines) used to
insert text

j. .r(reset maximum memory)
used to expand the buffer
size to over 7K, buffer must
first be written to disk and
reloaded after .r has been
executed

k. .m(set right margin) default is 78 chr. per line, this command sets the right margin (at which point the editor will no longer accept input)

1. .o(output to printer)
you can specify which lines
you want to send to the
printer

m. .s(string search) used to search the buffer for a specific match of characters, the next command is used to find the next occurrence of the same string

n. . (used after the .s above to find the next occurrence of a string)

o. .x(exit editor) used to exit back to the main command mode - you can exit with the buffer intact or you can .cy to clear-yes the buffer first

So, let's be done with the editor. You've tried out lots, if not all, of the above commands - you've done some right and you've blown a few - but, in any case, you are now more familiar with the basic editor commands of AEPRO and you have learned how to dial and capture information with AEPRO.

Type .cy (clear buffer, yes)
Type .x (exit editor)
Type xy (exit AEPRO, yes)

These options are fun to use, they are easy to use and if you need to print out or save to disk your text files captured with AEPRO, they are invaluable for helping you get rid of the extraneous junk first.

(That is enough for the first run through. In the next issue I will give you my 'simple solution to the problem of transfers' which will teach you, and remind me, 1) how to get a file from another computer 2) how to send a file to another computer and 3) how to directly type to another computer. We will cover the fun problem of 'setting up macros' . . . with AEPRO!)

#### Disk Library

NIAUG maintains a disk library containing a variety of Public Domain software. These programs have been contributed by NIAUG members, the International Apple Core, and other user groups.

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# FOR BEGINNERS ONLY - ASCII EXPRESS THE PROFESSIONAL Part 2

by Sandra Brockmann

(This article presumes that you have AEPRO, a Hayes Micromodem II, a disk drive or two and an Apple or equipment similar to the above — and that AEPRO is booted up in Drive 1.)

A SIMPLE SOLUTION TO THE PROBLEM OF TRANSFERS

#### YOU WANT A FILE FROM ANOTHER APPLE

Type D(dial number)
You get Number?
Type number you want to dial
Hit Return
You get AE:Dialing: (and it dials the number)
You get AE:Waiting to connect . . .

When and if you are connected your screen clears

and you see that . . . The other computer says

AE Term-->
ENTRY:

You type in the password of that computer (default .AE.)
You get (> prompt
Type D for a directory of the other computers' drive
You type S(for send to your own computer)
You get (>Send

You type name of file you want to get, Return

You get Wait . . . You get # blocks

You hit CTRL Q (to get into your APPLE)

You get +>

You type G (for get) You get Filename?

You type ,d2 (to put it on drive 2 or 1

as the case may be) You get Filename?

You type in name of file, Return

You get WAIT

You get Ready to Receive and the file is automatically transferred to your drive! While the file is being transferred you see:

Filetype:

R<#>

AE:Successful transfer

CRC= #

AE Term--> .

CRC= # (the numbers or letters after the CRC's will match)

You can now hit CTRL Q H to hang up!

## YOU WANT ANOTHER APPLE TO RECEIVE A FILE FROM YOUR APPLE

Type D(dial number)
You get Number?
Type number you want to dial
Hit Return
You get AE:Dialing: (and it dials the number)
You get AE:Waiting to connect . . .

When and if you are connected your screen clears

and you see that . . .

The other computer says:

AE Term-->
ENTRY:

You type in the password of that computer (default .AE.)
You get (> prompt
You type R(telling the other computer to receive a file)

whoops, you have forgotten the filename

You hit CTRL Q , I , C to catalog your drive and find the filename
You hit return to get back into the other computer
You get AE:Term-->

(>Receive:

You get Filename?

You type in the filename of file on your drive, Return
You get Ready to receive
You hit CTRL Q (to get back into your APPLE)
You get +> which indicates you are in your APPLE
You type S(for send to the other APPLE)

You again type in the name of the file, this time you are telling

your APPLE which file to send along .

You get S)tandard or P)rotocol?

You type P

You get AE: Ready to send

AE:Waiting

You wait - and the transfer happens! You get SUCCESSFUL TRANSFER and two matching numbers

You breath a sigh of relief, it worked!!!

#### TO ACTIVELY TYPE A MESSAGE TO ANOTHER APPLE

Type D for dial You get Number? Type number you wish to dial Hit Return You get AE:Dialing:(and it dials the number) You get AE: Waiting to connect . . .

When and if you are connected your screen clears

and you see that . . . The other computer says:

> AE Term--> ENTRY:

You type in the password of that computer (default .AE.)

You get (> prompt

You type C(for copy incoming)

You get (>COPY: you make up a filename and enter it here, Return

You hit CTRL Q E to get into your

computer and half duplex

You get the ! prompt at which point . .

You type your message, hit return

When you are done typing you hit CTRL C, CTRL C

You get SUCCESSFUL WRITE

You get (>

The two CTRL C's end and send your message

You hit CTRL Q E to get back to full

You can now hit return to get into the other computer

You get (>

You can now type D for a directory of

that other computer You can check on the drive logged to see if your message is there! CTRL Q H will hang you up, thus terminating the connection!

At the prompt typing H will give you a HELP list of the commands:

C(opy) incoming text

D(irectory) of currently logged

H(elp) - displays this list

R(eceive) a file S(end) a file

V(iew) a file

Whenever you have the (> prompt it means you are in the other computer (the hostcomputer) and you are ready to enter a command.

Whenever you have the +> prompt means youare in your computer and are ready to enter a command.

In order to abort the listing of the directory once you have found your file. hit ESC.

When you are connected to another computer you are allowed about 40 seconds of inactivity before you disconnected !!!!!!!!!!!!!!

If you just want to look at a file on either computer type V(for view) and you will be

asked to type in the name of the file you want to see.

Next month, I promise, we will set up our macros and we will also get into some other neat options with AEPRO!

#### \*PUBLIC ACCESS MESSAGE SYSTEMS\*

(P.A.M.S.) last updated 10/22/83°
"with"
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\*Compiled and maintained by Bill Blue\*

(with a lot of help from his friends)\*

"Please send updates/corrections to:"
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#### - PLEASE NOTE LIST FORMAT CHANGES b01-

denotes 24-hour operation denotes 8-12 hour DAYTIME operation ONLY denotes 8-12 hour NIGHTTIME operation ONLY new system or new number to existing system Supports VADIC 1200 baud operation Supports 212A 1200 baud operation Supports BAUDOT operation 1 denotes original system of that type denotes game oriented messages 성 download/program exchange system mail/information exchange only mi denotes call, let ring once and call back ψ Ц religious orientation 80 sexually oriented messages

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| NET-WORKS Toronto Ontario CN                                   | (416) 445 6696*   | RCP/M Blue Ridge Miss City TX                         |                                    |
| NET-WORKS Warlock's St Louis MO                                |                   | RCP/M Boulder CO                                      |                                    |
| NET-WORKS Zachary Net Houst TX                                 | (713) 933 7353*   | RCP/M Bridgeport IL                                   |                                    |
|                                                                | 1040) 400 55444   | RCP/M CBBS ANAHUG Anaheim CA                          |                                    |
| ONLINE Movie Guide Mission KS                                  |                   | RCP/M CBBS Columbus OH                                |                                    |
| ONLINE Omega Chicago IL                                        |                   | RCP/M CBBS Dallas TX                                  | (214) 931 82/4-                    |
| ONLINE Saba San Diego CA                                       | (019) 085 1801.   | RCP/M CBBS Frog Hilw Vanc BC CN                       |                                    |
| DaDMO 4 Laborido CARR                                          | (610) E61 7271°-1 | RCP/M CBBS Frmrs Brnch TX&\$                          |                                    |
| PdBMS 1 - Lakeside CA\$&                                       |                   | PCPAI CRRS Melbourne Australia                        | (C14)                              |
| PdBMS 2 - Denver CO\$&!                                        | (303) 733 3300 MI | RCP/M CBBS Melbourne Australia RCP/M CBBS Pasadena CA | (213) 702 3000                     |
| PET BBS Commodore Largo FL                                     | (R13) 301 5210    | RCP/M CBBS Technical Detri MI&                        | (313) 846 6127*                    |
| PET BBS Commodore Chicago IL                                   | (312) 397 0971*   | RCP/M Chuck Forsberg OR\$&                            |                                    |
| PET BBS AVC Indianapolis, IN                                   |                   | RCP/M Oxgate San Jose CA                              |                                    |
| PET BBS SEWPUG Racine WI                                       | (414) 554 9520°   | RCP/M CUG-NOTE Denver CO                              |                                    |
| PET BBS SE PUG Chayenne WY                                     | (307) 637 6045*   | RCP/M CUG-NODE PA St College PA                       |                                    |
| . Li DDG GE i GG Gligfolillo III - IIIIIIII                    | ,,                |                                                       | ,, ,                               |

| CRCPM McCardy Edmnn Mat CN88                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |                                  |                                    |                                  |                        |
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| RCPM ED Niston Argonne IL. (312) 972 6979 RCPM RBBS New Brunswick IV. (201) 982 2977 RCPM RBBS San Diego CASA (619) 227 3654* RCPM RBBS San Diego CAS (619) 236 5055* RCPM RBBS San Diego CAS (619) 236 5055* RCPM RBBS San Diego CAS (619) 236 7042* RCPM RBBS Pieco Charlego CAS (619) 237 817 447 817 817 817 817 817 817 817 817 817 81                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |                                  |                                    |                                  |                        |
| RCPM ED Niston Argonne IL. (312) 972 6979 RCPM RBBS New Brunswick IV. (201) 982 2977 RCPM RBBS San Diego CASA (619) 227 3654* RCPM RBBS San Diego CAS (619) 236 5055* RCPM RBBS San Diego CAS (619) 236 5055* RCPM RBBS San Diego CAS (619) 236 7042* RCPM RBBS Pieco Charlego CAS (619) 237 817 447 817 817 817 817 817 817 817 817 817 81                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | RCP/M DBASE II San Jose CA       | (408) 378 8733*                    | RCP/M RBBS Boodanovich, NJ       | (201) 747 7301         |
| CPAM Flanders NJA                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |                                  |                                    |                                  |                        |
| RCPM Genesso L. (309) 944 5455 RCPM RBBS Crygate San Jose CA. (469) 237 5901* RCPM Granda Hills CA (312) 480 2597* RCPM RBBS Southfield MI (313) 599 5326* RCPM Harder BBS Melbourne FLIL. (305) 676 3573* RCPM RBBS SDCS San Diego CA. (519) 246 15117* RCPM Harder BBS Melbourne FLIL. (305) 676 3573* RCPM RBBS RDCS San Diego CA. (519) 246 15117* RCPM MCBS Royar Chicago L. (312) 226 522 156* RCPM MLos Angeles CA (313) 295 5227* RCPM RBBS Velocity Diego CA. (415) 246 15117* RCPM MCBS Royar Chicago L. (312) 295 52678 RCPM RBBS SI MC Oympia WA. (206) 453 2056 61 RCPM Mid-Surtok Long Isl MY (516) 751 5539. RCPM MSSsanupa Tor Ort CN\$5. (416) 222 2444* RCPM SLBSS Bears/ort NY. (316) 375 25958* RCPM MSSS Bears/ort NY. (316) 377 7616* RCPM North Chic Chic L. (312) 393 1635. RCPM MSSS Johnson Chy SY 1018* RCPM SLBSS Bears/ort NY. (317) 764 164- RCPM Oxygate Coty Stat TX. (409) 943 6155. RCPM MSSS SLB Johnson Chy SY 1018* RCPM Oxygate Coty Stat TX. (409) 943 6157. RCPM Diego Coty Stat TX. (409) 943 6157. RCPM Diego Coty Stat TX. (409) 943 6157. RCPM RBS Aller Stat TX. (409) 943 6157. RCPM RBS RBS Aller Stat TX. (409) 943 6157. RCPM RBS RBS RBC Coth Ramber Stat TX. (409) 943 6157. RCPM RBS RBC RBC Coth Ramber Stat TX. (409) 943 6157. RCPM RBS RBC RBC Coth Tank CA. (409) 753 940 943 6157. RCPM RBS RBC RBC Coth Tank                                      |                                  |                                    |                                  |                        |
| CPCPM Glene Ellyn Chicago II.   312, 469 2597   CPCPM RBBS Southfield MI   613) 559 5326   CPCPM Haber Bell Melbourne FLB.   (305) 670 3573   CPCPM Haber Square Chicago II.   (312) 252 2135   CPCPM Michael Melbourne FLB.   (305) 670 3573   CPCPM Haber Michael Melbourne FLB.   (305) 670 3573   CPCPM Haber Michael Melbourne FLB.   (305) 670 3573   CPCPM Michael Melbourne FLB.   (305) 680 690   CPCPM Michael Melbourne FLB.   (305) 680 690   CPCPM Michael Melbourne FLB.   (305) 582 5960   CPCPM Michael Melbourne FLB.   (305) 587 5960   CPCPM Michael Melbourne FLB.   (307) 585 593   CPCPM Michael Melbourne FLB                                         |                                  |                                    |                                  |                        |
| RCPM Harder BBS Melbourne FLL (213) 369 5075   RCPM Harder BBS Melbourne FLL (213) 269 5075   RCPM Harder BBS Melbourne FLL (213) 269 5075   RCPM Harder BBS Melbourne FLL (213) 269 5075   RCPM Mass Square Chitago LL (213) 225 5227   RCPM RBBS HCD04 La Mesa CA1 (819) 461 5117   RCPM Los Angeles CA (213) 225 5227   RCPM RBBS Network (213) 276 5690   RCPM Mid-Suffolk Long Isl NY (516) 751 5633   RCPM Mid-Suffolk Long Isl NY (516) 757 5639   RCPM Mid-Suffolk Long Isl NY (516) 757 5639   RCPM Mid-Suffolk Long Isl NY (516) 757 5639   RCPM Moster Good Isl NY (516) 757 5639   RCPM Mid-Suffolk Long Isl NY (516) 757 5639   RCPM Mid-Suffolk Mid-Suffolk Isl NY (516) 757 5630   RCPM Mid-Suffolk Mid-Suffolk Isl NY (516) 758 5630                                          |                                  |                                    | HCP/M RBBS Oxgate San Jose CA    | (408) 287 5901         |
| RCPM Ham Radio Motron Grove IL. (312) 957 0052 RCPM Ham Radio Motron Grove IL. (312) 957 0052 RCPM Ham Radio Motron Grove IL. (312) 957 0052 RCPM Logan Square Chicago IL. (312) 252 2136* RCPM Robert                                       | RCP/M Glen Ellyn Chicago IL      | (312) 469 2597*                    | RCP/M RBBS Southfield MI         | (313) 559 5326*        |
| RCPM Ham Radio Motron Grove IL. (312) 957 0052 RCPM Ham Radio Motron Grove IL. (312) 957 0052 RCPM Ham Radio Motron Grove IL. (312) 957 0052 RCPM Logan Square Chicago IL. (312) 252 2136* RCPM Robert                                       | RCP/M Granada Hills CA           | (213) 360 5053*                    | RCP/M RBBS Tampa FL              | (813) 831 7276         |
| RCPM Harker BBS Melbourne FLB. (305) 676 3573* RCPM Algas Square Chicago L. (312) 252 2395* RCPM Los Angeles CA (213) 256 5927* RCPM Los Angeles CA (213) 256 5927* RCPM Mich School Los Mais (313) 795 65694 RCPM Mich School Los Mil. (313) 795 65694 RCPM Mich School Los Mil. (313) 795 65694 RCPM Mich School Los Mil. (312) 379 65694 RCPM Mich School Los Mil. (312) 379 65694 RCPM Mich School Los Mil. (312) 382 9583* RCPM Mississauga Tor Ort CN\$8. (416) 232 25844* RCPM Mississauga Tor Ort CN\$8. (416) 232 25854* RCPM Mississauga Tor Ort CN\$8. (416) 232 25854* RCPM Mississauga Tor Ort CN\$8. (416) 232 25854* RCPM Mississauga Tor Ort CN\$8. (416) 237 5593 RCPM Mississauga Tor Ort CN\$8. (416) 237 759 2593 RCPM Mississauga Tor Ort CN\$8. (416) 245 5593* RCPM Mississauga Tor Ort CN\$8. (416) 245 5593* RCPM Mississauga Tor Ort CN\$8. (416) 245 5593* RCPM Mississauga Tor CN\$8. (416) 245 533 2202* RCPM RBBS Anstance Oo Spags CO1 (320) 398 4852* RCPM RBBS Anstance Oo Spags CO1 (320) 398 4852* RCPM RBBS Anstance Oo Spags CO1 (320) 398 4852* RCPM RBBS Anstance Oo Spags CO1 (320) 398 4852* RCPM RBBS Anstance Oo Spags CO1 (320) 398 4852* RCPM RBBS Coniented On Spags CO2 (416) 450 450 450 450 450 450 450 450 450 450                                                                                  |                                  |                                    |                                  |                        |
| RCPM Logan Square Chicago I. (312) 252 2135° RCPM RBSS Windoxtpol WA. (206) 493 3086 fo RCPM MCBSS Royal Oak MI. (313) 759 65996 RCPM RBSS Windoxtpol WA. (206) 493 3086 fo RCPM MCBSS Royal Oak MI. (313) 759 65996 RCPM RBSS Windoxtpol WA. (206) 493 3086 fo RCPM RBSS Windoxtpol WA. (206) 493 3086 fo RCPM RBSS Windoxtpol WA. (206) 493 3086 fo RCPM RBSS Windoxtpol WA. (206) 527 7297 RCPM RBSS Windoxtpol WA. (206) 527 7297 RCPM RBSS Windoxtpol WA. (206) 527 7400° RCPM SWINDOXTPOL COLOR WINDOXTPOL WINDOXTPOL WA. (206) 437 7400° RCPM SWINDOXTPOL COLOR WINDOXTPOL                                       |                                  |                                    |                                  |                        |
| RCPM Los Angeles CA                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                                  |                                    |                                  |                        |
| RCPM MCBSS Floyal Oak MI (313) 759 6599b RCPM Rich/Famous, San Fran Ca. (415) 552 9985 RCPM Mission KAA. (416) 527 9515 5539- RCPM Mission KAA. (416) 527 9515 5539- RCPM Mission KAA. (416) 527 9515 5539- RCPM Mission KAA. (416) 527 9513 PCPM Mission KAA. (416) 522 9541 RCPM Mission KAA. (416) 522 9541 RCPM MISSION KAA. (416) 522 9541 RCPM MISSION KAA. (416) 432 954 96199- RCPM MSD KAN (416) 437 957 9599 RCPM MSD KAN (416) 438 97 1037 RCPM RIBS Chain man (416) 438 97 1038 PCPM RIBS Chain man (416) 438 97 1038 97 1038 97 1038 PCPM RIBS Chain man (416) 438 97 1038 97 1038 97 1038 PCPM RIBS Chain man (416) 438 97 1038 97 1038 97 1038                                        | RCP/M Logan Square Chicago IL    |                                    |                                  |                        |
| RCPM MCBSS Floyal Oak MI (313) 759 6599b RCPM Rich/Famous, San Fran Ca. (415) 552 9985 RCPM Mission KAA. (416) 527 9515 5539- RCPM Mission KAA. (416) 527 9515 5539- RCPM Mission KAA. (416) 527 9515 5539- RCPM Mission KAA. (416) 527 9513 PCPM Mission KAA. (416) 522 9541 RCPM Mission KAA. (416) 522 9541 RCPM MISSION KAA. (416) 522 9541 RCPM MISSION KAA. (416) 432 954 96199- RCPM MSD KAN (416) 437 957 9599 RCPM MSD KAN (416) 438 97 1037 RCPM RIBS Chain man (416) 438 97 1038 PCPM RIBS Chain man (416) 438 97 1038 97 1038 97 1038 PCPM RIBS Chain man (416) 438 97 1038 97 1038 97 1038 PCPM RIBS Chain man (416) 438 97 1038 97 1038 97 1038                                        | RCP/M Los Angeles CA             | (213) 296 5927*                    | RCP/M RBBS Yelm Olympia WA       | (206) 458 3086 rb      |
| RCPM Mississauga für Ont CN\$4. (913) 362 9983' RCPM Mississauga für Ont CN\$4. (913) 362 9983' RCPM Mississauga für Ont CN\$4. (916) 322 2844' RCPM North Chic Chic IL. (312) 949 6189- RCPM North Chic Chic IL. (312) 949 6189- RCPM North Chic Chic IL. (312) 937 5539- RCPM North Chic Chic IL. (312) 949 6189- RCPM North Chic Chic IL. (409) 845 0591' RCPM Orgate Cotg Stat TX (409) 845 0591' RCPM Orgate Cotg Stat TX (409) 845 0591' RCPM Orgate Cotg Stat TX (409) 845 0591' RCPM Orgate OOT Gration VA. (804) 889 74831' RCPM Orgate OOT Gration VA. (804) 889 74831' RCPM Program Avon Gorham ME& (207) 839 2337' RCPM Program Avon Gorham ME& (207) 839 2337' RCPM RORS Alter State Cotg State                                     |                                  |                                    |                                  |                        |
| RCPM Mission KAA (6) 222 2844  RCPM Mission KAA (6) (8) 522 2844  RCPM Mission KAB (6) (222 2844)  RCPM NEI Chicago ILA (312) 949 6189  RCPM NEI Chicago ILA (312) 949 6189  RCPM Norgh Chic Chic L. (312) 837 5639  RCPM Olympia WA (408) 837 5639  RCPM Olympia WA (408) 837 5639  RCPM Olympia VA (408) 845 0659  RCPM RIBBS Allest Humpia VA (409) 845 0659  RCPM RIBBS Compine Gun Na (408) 845 0659  RCPM RIBBS OU San Jose CA (408) 289 9821*  RCPM RIBBS OU San Jose CA (408) 289 9821*  RCPM RIBBS OU San Jose CA (408) 289 9821*  RCPM RIBBS DI Paso TX (915) 589 1685*  RCPM RIBBS DI TA Eponnia (107) 848 2831  RCPM RIBBS DI TA Eponnia (108) 843 6459  RCPM RIBBS DI SURGO CASA (108) 845 65009  RCPM R                                       |                                  |                                    |                                  |                        |
| RCPM Mississauga TOr Ort CN\$4. (416) 223 2844* RCPM North Chic Chic II. RCPM Oxgalo Old Stat TX (209) 835 7400* RCPM Oxgalo Old Stat TX (409) 845 (560°* RCPM North Oxgalo Old Stat TX (409) 845 (560°* RCPM Spatian Learington MA\$8. (617) 862 0781* RCPM Oxgalo Old Gration VA (804) 883 7483* RCPM System Two Toronto CNA (416) 231 1282* RCPM Reps Almos Gorham ME & (207) 839 2337* RCPM Reps Almos Gorham ME & (207) 839 2337* RCPM Reps Almos Gorham ME & (207) 839 2337* RCPM Reps Almost Interval State Type Type Type Type Type Type Type Typ                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |                                  |                                    |                                  |                        |
| RCPM NEI Chicago IL & (312) 949 6189- RCPM North Chic Chie IL (312) 837 5639 RCPM Oympia WA RCPM Oympia WA RCPM Oympia WA RCPM Oympia Clog Start X (409) 845 0569* RCPM Oympia Clog Start X (409) 848 7483* RCPM Oympia Clog Start X (409) 848 7483* RCPM Oympia Clog Start X (409) 848 7483* RCPM Oympia Clog Start W (401) 731 50256b RCPM Roympia Shehaled Lawrence K4 (913) 843 4299- RCPM Roympia Clog Start W (401) 731 50256b RCPM Roympia Clog Start W (401) 731 503 72020* RCPM Roympia Clog Start W (401) 731 503 72020* RCPM Roympia Clog Start W (401) 731 731 731 731 731 731 731 731 731 731                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                  |                                    |                                  |                        |
| RCPM North Chic Chic I                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |                                  |                                    |                                  |                        |
| RCPM North Chic Chic I                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | RCP/M NEI Chicago IL&            | (312) 949 6189-                    | RCP/M SJBBS Johnson City NY      | (607) 797 6416-        |
| RCPM Oympia WA  (206) 357 7400* RCPM Oyagla COg Stalt X  (408) 394 5509* RCPM Oyagla COG Stalt X  (408) 394 5231* RCPM Providence RI  (401) 751 5025th RCPM Providence RI  (401) 751 5025th RCPM RESS Allentown PA  (215) 398 3937* RCPM RESS Allentown PA  (215) 398 3937* RCPM RESS Shipmanke Lawrence KA  (913) 843 4299- RCPM RESS Compose COG  (303) 598 46822* RCPM RESS Compose COG  (303) 498 0149- RCPM RESS Compose COG  (303) 498 0149- RCPM RESS Compose COG  (403) 492 5246- RCPM RESS Compose COG  (404) 492 5246- RCPM RESS Compose COG  RCPM RESS Compose COG  (405) 732 29190 RCPM RESS Compose COG  RCPM RESS COG Tog COG  RCPM RESS COG COG  RCPM RESS COG Tog COG  RCPM RES                                       |                                  |                                    |                                  | •                      |
| RCPM Orgate Cot Stat TX                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                                  |                                    |                                  | (AOR) 730 9733.        |
| RCPM Orgate 001 Saratoga CA\$\$. (488) 354 9834* RCPM Orgate 007 Garton VA. (864) 898 7493* RCPM Providence RI. (401) 751 5025tb RCPM RBBS AlMS Hirsdale IL. (312) 789 0495* RCPM RBBS Alms AlphaNet Lawrence KA. (913) 843 4239- RCPM RBBS AlphaNet Lawrence KA. (913) 843 4239- RCPM RBBS Shehasda MD. (301) 584 5662* RCPM RBBS Shehasda MD. (301) 584 5662* RCPM RBBS Shehasda MD. (301) 681-2175* RCPM RBBS Cinational OH. (513) 489 0149- RCPM RBBS Cinational OH. (513) 489 0149- RCPM RBBS Compt Eath and CN. (403) 482 6854* RCPM RBBS Compt Eath Alb CN. (403) 482 6854* RCPM RBBS Compt Eath Alb CN. (403) 482 6854* RCPM RBBS OT San Jose CA. (406) 238 9621* RCPM RBBS OT San Jose CA. (406) 238 9621* RCPM RBBS 010 Sumyvale CA. (405) 782 9190 RCPM RBBS 010 Sumyvale CA. (405) 782 9190 RCPM RBBS D11 TX Epsonsch) (617) 848 6281 RCPM RBBS Strip AE pson (617) 848 6281 RCPM RBBS Strip AE pson (617) 848 6281 RCPM RBBS Tran CA son! (415) 599 1668* RCPM RBBS Rain Rain CA (415) 499 179 189                                      |                                  |                                    |                                  |                        |
| RCPM Orgate 007 Crafton VA (904) 889 7483* RCPM Providence RI (401) 751 5025th RCPM Providence RI (401) 751 5025th RCPM Providence RI (401) 751 5025th RCPM RBBS Allimitown PA (215) 589 3837* RCPM RBBS Allimitown PA (215) 589 3837* RCPM RBBS Alphabet Lawrence KA (913) 843 4259- RCPM RBBS Arvada CO Spong COI (303) 599 4662* RCPM RBBS Arvada CO Spong COI (303) 599 4662* RCPM RBBS Arvada CO Spong COI (303) 599 4662* RCPM RBBS Corne Teach El Paso TX (915) 533 2202* RCPM RBBS Compt Teach El Paso TX (915) 533 2202* RCPM RBBS Compt Teach El Paso TX (915) 533 2202* RCPM RBBS Compt Teach El Paso TX (915) 533 2202* RCPM RBBS OIT San Carl CA1\$\$ (415) 595 0541* RCPM RBBS OIT San Carl CA1\$\$ (415) 595 0541* RCPM RBBS OIT San Carl CA1\$\$ (415) 595 0541* RCPM RBBS OIT San Carl CA1\$\$ (915) 593 1666* RCPM RBBS DI O San Jose CA (406) 732 9190 RCPM RBBS DI O San Jose CA (406) 732 9190 RCPM RBBS DI O San Jose CA (406) 732 9190 RCPM RBBS DI MA Epsont (617) 648 6261 RCPM RBBS Brid KA Epsont (917) 648 6261 RCPM RBBS Brid KA Epsont (916) 649 679 0387 RCPM RBBS Brid KA Epsont (916) 649 659 0387 RCPM RBBS Craf Total CA1 (707) 422 7256* RCPM RBBS Palos Verdes, CA\$\$ (313) 618 6974 RCPM RBBS Palos Verdes, CA\$\$ (313) 618 6900* RCPM RBBS Palos Verdes, CA\$\$ (313) 648 6900* RCPM RBBS Romer Conve, CA\$\$ (313) 649 659 0387 RCPM RBBS Romer Conve, CA\$\$ (313) 630 630 430* RCPM RBBS Romer Conve, CA\$\$ (313) 630 630* RCPM RBBS Romer Conve, CA\$\$ (313) 641 6520* RCPM RBBS Romer Con |                                  |                                    |                                  |                        |
| RCPM Programs Anno Gorham ME& (207) 839 2337* RCPM RDM Gordwidence RI (401) 751 502505                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | RCP/M Oxgate 001 Saratoga CA!\$& | (408) 354 5934"                    |                                  |                        |
| RCPM Programs Anno Gorham ME& (207) 839 2337* RCPM RDM Gordwidence RI (401) 751 502505                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | RCP/M Oxgate 007 Grafton VA      | (804) 898 7493*                    | RCP/M System Two Toronto CN&     | (416) 231 1262*        |
| RCPM Providence RI (401 751 5025th RCPM Techn Thousand Caks CAS (805) 425 5472 RCPM RBSS AMS Hinsicals II. (312 789 0499° RCPM TBS CLIPIN NJ. (201) 625 1797-RCPM RBSS AMIS Hinsicals II. (313 789 0499° RCPM RBSS Alphaket Lawrence KA. (913) 838 3377 RCPM RBSS Alphaket Lawrence KA. (913) 843 4259-RCPM RBSS Alphaket Lawrence KA. (913) 844 4259-RCPM RBSS Alphaket Lawrence KA. (913) 594 4259-RCPM RBSS Avada CO Sporg COI (303) 594 4662° RCPM RBSS Avada CO Sporg COI (301) 522 9196 Remote Northstar Creenbell MD. (301) 344 9156 Remote Northstar Vir Bch VA. (804) 340 5246 RCPM RBSS Cincinnati OH. (513) 489 0149-RCPM RBSS Cincinnati OH. (403) 482 6854* RCPM RBSS Corp Tech El Paso TX. (915) 533 2202° RCPM RBSS OOI San Cart CA1\$\$. (415) 595 0541* RCPM RBSS OOI San Lose CA. (408) 239 9621* TCBS Astrocom New York NY (914) 782 7605 RCPM RBSS OOI San Lose CA. (408) 239 9621* TCBS Astrocom New York NY (212) 799 4695* RCPM RBSS OOI San Lose CA. (408) 239 9621* TCBS Astrocom New York NY (212) 799 4695* RCPM RBSS OOI San Lose CA. (408) 239 9621* TCBS Astrocom New York NY (212) 799 4695* TCBS BAMS Ne                                     | RCP/M Proorms Anon Gorham MF&    | (207) 839 2337*                    |                                  |                        |
| RCPM RBSS AlmS Hirsdale II. (312) 789 0499* RCPM RBSS Almstown PA (215) 398 3937* RCPM RBSS AlphaNet Lawrence KA (913) 843 4259- RCPM RBSS AlphaNet Lawrence KA (913) 843 4259- RCPM RBSS AlphaNet Lawrence KA (913) 843 4259- RCPM RBSS Sethesda MD (301) 229 3196 RCPM RBSS BHEC Battimore MD (301) 229 3196 RCPM RBSS BHEC Battimore MD (301) 681-2175* RCPM RBSS Comp Tech El Paso TX (915) 533 2202* RCPM RBSS Comp Tech El Paso TX (915) 533 2202* RCPM RBSS Comp Tech El Paso TX (915) 533 2202* RCPM RBSS Comptin Edmin Alb CN (403) 482 6854* RCPM RBSS Got San Carl CA1\$& (415) 595 0541* RCPM RBSS GOT San Jose CA (408) 728 9190 RCPM RBSS GOT San Jose CA (408) 728 9190 RCPM RBSS SI Paso TX& (915) 598 1668* RCPM RBSS B Praso TX& (915) 598 1668* RCPM RBSS B Praso TX& (915) 598 1668* RCPM RBSS B Praso TX (915) 788 5614 RCPM RBSS B Tras RC As (916) 486 8231 RCPM RBSS B Tras RC As (916) 598 1668* RCPM RBSS B Tras RC As (916) 598 1668* RCPM RBSS B RT AR CA Ambert (714) 632 832 RCPM RBSS Plac CA Ambert (714) 632 832 RCPM RBSS Fairfield CA1 (916) 486 219 RCPM RBSS Fairfield CA1 (916) 446 219 RCPM RBSS Fairfield CA1 (916) 446 219 RCPM RBSS Paics Werds, CA\$& (714) 534 1547* RBS Austin TX 1 (512) 398 1102* RCPM RBSS Paics Werds, CA\$& (714) 534 1547* RBS Card Robot Werds (A4) 778 885 864 (714) 354 1547* RBS Card Robot Werds (A4) 779 277 659 778 RCPM RBSS IBM-PC Hawform CA\$ (213) 618 674 RCPM RBSS Rainfield CA1 (916) 446 219 RCPM RBSS Red Sarden Grove, CA\$& (714) 534 1547* RBS Serveport LA (916) 433 953 3731* RCPM RBSS IBM-PC Tustoon FA\$ (315) 935 3731* RCPM RBSS IBM-PC Tustoon FA\$ (315) 935 3731* RCPM RBSS IBM-PC Tustoon FA\$ (315) 935 3731* RCPM RBSS RAIncro CO1 (303) 690 456 2900* RCPM RBSS Rains Parc CO1 (303) 635 456 2900* RCPM RBSS Rains Parc CO1 (303) 635 456 2900* RCPM RBSS Rains Parc CO1 (303) 635 456 2900* RCPM RBSS Rains RAIncro CO1 (303) 635 456 2900* RCPM RBSS Rains RAIncro CO1 (303) 635 456 2900* RCPM RBSS Rains RAIncro CO1 (303) 635 456 2900* RCPM RBSS Rains RAIncro CO1 (303) 635 456 2900* RCPM RBSS Rains RAIncro CO1 (305) 63                               | DCDAL Demidence PI               | (401) 751 5025th                   |                                  |                        |
| RCPM RBBS AlphaNet Lawrence KA (913) 843 4259- RCPM RBBS Behiseda MD (301) 229 3196 RCPM RBBS Behiseda MD (301) 661-2175' RCPM RBBS Cincinnati OH (513) 489 0149- RCPM RBBS Cincinnati OH (513) 489 0149- RCPM RBBS Compt Tech El Paso TX (915) 533 2202' RCPM RBBS Compt Edmn Alb CN (403) 482 6854' RCPM RBBS Compt Edmn Alb CN (403) 482 6854' RCPM RBBS Compt Edmn Alb CN (403) 482 6854' RCPM RBBS OH San Carl CA158 (415) 959 0541' RCPM RBBS DI OS San Jose CA (408) 732 9190 RCPM RBBS DI OS San Jose CA (408) 732 9190 RCPM RBBS El Paso TX (915) 598 1668' RCPM RBBS El Paso TX (915) 598 1668' RCPM RBBS Bhst PA Epson1 (215) 788 5614 RCPM RBBS Bhst PA Epson1 (215) 788 5614 RCPM RBBS Bhst PA Epson1 (215) 788 5614 RCPM RBBS San Fran CA son1 (415) 589 5082 RCPM RBBS San Fran CA son1 (415) 689 5082 RCPM RBBS Cort Mis CC (803) 549 6900' RCPM RBBS Bhst PA Epsos All (409) 732 919 RBS Canspus Milwaukee Wil (414) 355 8839' RCPM RBBS Cort Mis CC (803) 549 6900' RCPM RBBS Cort Mis CC (803) 549 6900' RCPM RBBS Cort Mis CC (803) 549 6900' RBS Cort Mis CC (804) 549 6900' RBS Cort Mis CC (804) 549 6900' RBS Cort Mis CC (804) 549 6900                                       |                                  |                                    |                                  |                        |
| RCPM RBBS AlphaNet Lawrence KA (913) 843 4259 RCPM RBBS Arvada CO Spngs COI (303) 599 4662* RCPM RBBS BHECS Bethesda MD (301) 229 3196 RCPM RBBS BHECS Bethesda MD (301) 661-2175* RCPM RBBS BHECS Bethesda MD (301) 661-2175* RCPM RBBS Cincinnatio OH (513) 489 0149- RCPM RBBS Cincinnatio OH (513) 489 0149- RCPM RBBS Cincinnatio OH (513) 489 0149- RCPM RBBS Compt Edits Paso TX (915) 533 2202* RCPM RBBS Compt Edits Paso TX (915) 533 2202* RCPM RBBS Compt Edits Alb CN (403) 482 6854* RCPM RBBS Compt Edits Alb CN (403) 482 6854* RCPM RBBS COT San Jose CA (406) 239 9621* RCPM RBBS OT San Jose CA (406) 239 9621* RCPM RBBS DOT San Jose CA (406) 239 9621* RCPM RBBS DOT San Jose CA (406) 239 9621* RCPM RBBS DOT San Jose CA (406) 239 9621* RCPM RBBS BI Paso TX& (915) 596 1668* RCPM RBBS BI Paso TX& (915) 598 1668* RCPM RBBS BI Paso TX& (915) 598 1668* RCPM RBBS DOT SAN JOSE CA (406) 239 9610* RCPM RBBS DOT XA (915) 598 1668* RCPM RBBS DOT XE DOSONIC: (214) 559 0387 RCPM RBBS DOT XA (915) 598 1668* RCPM RBBS DOT XA (915) 598 1668* RCPM RBBS DOT XA (915) 598 1668* RCPM RBBS ROT XA (915) 598 1669* RCPM RBB                                       |                                  |                                    |                                  |                        |
| RCPM RBBS Aireada CO Sprags COI (303) 598 4862* RCPM RBBS Bethesda MD (301) 229 3196 RCPM RBBS Bethesda MD (301) 229 3196 RCPM RBBS Bethesda MD (301) 681-2175* RCPM RBBS Cincinnati OH (513) 489 0149- RCPM RBBS Comp Tech El Paso TX (915) 533 2202* RCPM RBBS Comp Tech El Paso TX (915) 533 2202* RCPM RBBS Compt Edm Alb CN (403) 482 6854* RCPM RBBS Compt Edm Alb CN (403) 482 6854* RCPM RBBS Control NJ (201) 272 1874* RCPM RBBS Control NJ (201) 272 1874* RCPM RBBS OT San Jose CA (408) 238 9621* RCPM RBBS OT San Jose CA (408) 238 9621* RCPM RBBS D1 Sun Sun Jose CA (408) 732 9190 RCPM RBBS D10 Sunnyale CA (406) 732 9190 RCPM RBBS D10 Sunnyale CA (406) 732 9190 RCPM RBBS B1 MA Eponal (617) 648 6864* RCPM RBBS B1 MA Eponal (215) 788 5614 RCPM RBBS B1 MA Eponal (215) 788 5614 RCPM RBBS P1 MA Eponal (215) 788 5614 RCPM RBBS F1 MA Eponal (215) 788 5614 RCPM RBBS RD RC A MARIAN (215) 789 781 RCPM RBBS RD RCPM RBBS ROLL (215) 781 781 781 781 781 781 781 781 781 781                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | RCP/M RBBS Allentown PA          | (215) 398 3937*                    | RCP/M W Carrolton Dayton OH      | (513) 435 5201°        |
| RCPM RBBS Aireada CO Sprags COI (303) 598 4862* RCPM RBBS Bethesda MD (301) 229 3196 RCPM RBBS Bethesda MD (301) 229 3196 RCPM RBBS Bethesda MD (301) 681-2175* RCPM RBBS Cincinnati OH (513) 489 0149- RCPM RBBS Comp Tech El Paso TX (915) 533 2202* RCPM RBBS Comp Tech El Paso TX (915) 533 2202* RCPM RBBS Compt Edm Alb CN (403) 482 6854* RCPM RBBS Compt Edm Alb CN (403) 482 6854* RCPM RBBS Control NJ (201) 272 1874* RCPM RBBS Control NJ (201) 272 1874* RCPM RBBS OT San Jose CA (408) 238 9621* RCPM RBBS OT San Jose CA (408) 238 9621* RCPM RBBS D1 Sun Sun Jose CA (408) 732 9190 RCPM RBBS D10 Sunnyale CA (406) 732 9190 RCPM RBBS D10 Sunnyale CA (406) 732 9190 RCPM RBBS B1 MA Eponal (617) 648 6864* RCPM RBBS B1 MA Eponal (215) 788 5614 RCPM RBBS B1 MA Eponal (215) 788 5614 RCPM RBBS P1 MA Eponal (215) 788 5614 RCPM RBBS F1 MA Eponal (215) 788 5614 RCPM RBBS RD RC A MARIAN (215) 789 781 RCPM RBBS RD RCPM RBBS ROLL (215) 781 781 781 781 781 781 781 781 781 781                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | RCP/M RBBS AlphaNet Lawrence KA  | (913) 843 4259-                    | •                                | •                      |
| RCPM RBBS Bethesda MD                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                  |                                    | Remote Northstar Denver CO       | (303) 444 7231         |
| RCPM RBBS Cincinnati OH (513) 489 0149- RCPM RBBS Cincinnati OH (513) 489 0149- RCPM RBBS Compt Tech El Paso TX (915) 533 2202* RCPM RBBS Compt Edm Alb CN (403) 482 6854* RCPM RBBS Compt Tech El Paso TX (915) 533 2202* RCPM RBBS Compt Tech El Paso TX (915) 533 2202* RCPM RBBS Compt Tech El Paso TX (915) 533 2202* RCPM RBBS O1 San Carl CA1\$& (415) 595 0541* RCPM RBBS 01 Sumyrais CA (408) 723 9190 RCPM RBBS 01 Sumyrais CA (408) 723 9190 RCPM RBBS 01 Sumyrais CA (408) 723 9190 RCPM RBBS B1 MA Epson! (617) 848 8281 RCPM RBBS BT STA Epson! (215) 788 5614 RCPM RBBS BT STA Epson! (215) 788 5614 RCPM RBBS BT STA Epson! (215) 788 5614 RCPM RBBS Pist PA Epson! (415) 589 5062 RCPM RBBS Pac CA Amber! (714) 633 332 RCPM RBBS Tran CA son! (415) 589 5062 RCPM RBBS TCS Tulsa OK (918) 446 5219 RCPM RBBS FOR TAM Epson! (213) 618 8674 RCPM RBBS FOR TAM Epson! (213) 618 8674 RCPM RBBS FOR TAM Epson! (213) 618 8674 RCPM RBBS FOR TAM Epson! (415) 589 5062 RCPM RBBS FOR TAM Epson! (415) 589 5062 RCPM RBBS TCS Tulsa OK (918) 446 5219 RCPM RBBS FOR TAM Epson! (512) 385 1102* RCPM RBBS For Mill SC (623) 548 0900' RCPM RBBS For Mill SC (623) 548 0900' RCPM RBBS For Mill SC (623) 548 0900' RCPM RBBS Garden Grove, CA\$& (714) 533 1547* RCPM RBBS Garden Grove, CA\$& (714) 533 1547* RCPM RBBS Cadar Rapids IA (319) 363 3314 RCPM RBBS Cadar Rapids IA (319) 363 3314 RCPM RBBS Hollywood CA (213) 653 65396' RCPM RBBS BIM-PC Orlando FL\$& (305) 830 4340' RCPM RBBS BIM-PC Orlando FL\$& (305) 830 4340' RCPM RBBS BIM-PC Orlando FL\$& (305) 830 4340' RCPM RBBS Laurel MD (301) 983 3753' RCPM RBBS Laurel MD (301) 983 3753' RCPM RBBS Napa Valley CA (707) 257 6502' RCPM RBBS Pegasus Houston TX (713) 882 1624' RCPM RBBS                                 |                                  |                                    |                                  |                        |
| RCP/M RBBS Comp Tech El Paso TX (915) 533 2202° RCP/M RBBS Comp Tech El Paso TX (915) 533 2202° RCP/M RBBS Comp Tech Edmn Alb CM (403) 482 6854* RCP/M RBBS Compt Techm Alb CM (403) 482 6854* RCP/M RBBS OT San Carl CA15& (415) 550 5641* RCP/M RBBS 001 San Carl CA15& (415) 550 5641* RCP/M RBBS 001 San Carl CA15& (415) 550 5641* RCP/M RBBS 001 San Carl CA15& (416) 732 9190 RCP/M RBBS 010 San Carl CA15& (408) 732 9190 RCP/M RBBS 010 San Carl CA15& (408) 732 9190 RCP/M RBBS 101 San Carl CA15& (408) 732 9190 RCP/M RBBS El Paso TX& (915) 598 1666* RCP/M RBBS El Paso TX& (915) 598 1666* RCP/M RBBS Brist PA Epson! (617) 848 8281 RCP/M RBBS Brist PA Epson! (214) 659 0387 RCP/M RBBS Brist PA Epson! (214) 659 0387 RCP/M RBBS Dal TX Epsonstc)! (214) 659 0387 RCP/M RBBS Dal TX Epsonstc)! (214) 659 0387 RCP/M RBBS San Fran CA son! (415) 589 5062 RCP/M RBBS TCS Tulsa OK (918) 446 5219 RCP/M RBBS TCS Tulsa OK (918) 446 5219 RCP/M RBBS TCS Tulsa OK (918) 446 5219 RCP/M RBBS Failfield CA! (707) 422 7256* RCP/M RBBS Failfield CA! (707) 422 7256* RCP/M RBBS Garden Grove, CA\$& (714) 534 1547* RCP/M RBBS Palos Verdes, CA\$& (213) 541 2503* RCP/M RBBS Valley Helen MT (406) 443 2768 RCP/M RBBS Valley Helen MT (406) 443 2768 RCP/M RBBS Nalles Nallen Mallen MT (406) 443 2768 RCP/M RBBS Lalles Welley Helen MT (406) 443 2768 RCP/M RBBS BIBM-PC Tulsa OK (918) 749 0718 RCP/M RBBS Lalles Welley Helen MT (406) 443 2768 RCP/M RBBS Lalles Lalles MD (301) 953 1753* RCP/M RBBS Lalles MD (701) 643 5436 RCP/M RBBS Lalles Lalles MD (301) 953 1753* RCP/M RBBS Lalles MBS Holtwrite AL (205) 885 6739* to TBBS Streepont LA (316) 635 8660* RCP/M RBBS Lalles MBS Malles Mall                                     |                                  |                                    |                                  |                        |
| RCP/M RBBS Comp Tech El Paso TX (915) 533 2202* RCP/M RBBS Compire Edmn Alb CN (403) 482 6854* RCP/M RBBS Cranford NJ (201) 272 1874* ST80-PBB Camera Monroe NY (914) 782 7805 RCP/M RBBS O17 San Jose CA (408) 238 9621* RCP/M RBBS 010 Sunnyvale CA (408) 732 9190 RCP/M RBBS 010 Sunnyvale CA (408) 732 9190 RCP/M RBBS B TM A Epson! (617) 848 8281 RCP/M RBBS B TM A Epson! (617) 848 8281 RCP/M RBBS B TM A Epson! (215) 788 5614 RCP/M RBBS B TM A Epson! (214) 659 0387 RCP/M RBBS Par CA A Amber! (714) 652 8332 RCP/M RBBS Par CA Amber! (714) 652 8332 RCP/M RBBS Tor CA Tolado! (213) 618 8674 RCP/M RBBS Fort Mill SC (803) 548 9000 RCP/M RBBS Fort Mill SC (803) 548 9000 RCP/M RBBS Fort Mill SC (803) 548 9000 RCP/M RBBS Codar Rapids IA (319) 363 3314 RCP/M RBBS BM-PC Orlando FLS& (305) 830 4340* RCP/M RBBS BM-PC Orlando FLS& (303) 935 1100* RCP/M RBBS BM-PC Tulsa OK (918) 443 2768 RCP/M RBBS BM-PC Orlando FLS& (303) 935 1100* RCP/M RBBS BM-PC Orlando FLS& (303) 935 1100* RCP/M RBBS BM-PC Orlando FLS& (303) 935 1100* RCP/M RBBS Lanrishor CA (415) 461 7726* RCP/M RBBS Lanrishor CA (415) 363 0473* RCP/M RBBS Lanrishor CA (415) 363 0473* RCP/M RBBS Lanrishor CA (415) 363 0473* RCP/M RBBS Lanrishor CA (415) 461 7726* RCP/M RBBS Lanrishor CA (415) 461 7726* RCP/M RBBS Napa Valley CA (707) 257 6502* RCP/M RBBS Napa Valley CA (707) 257 6502* RCP/M RBBS Peassus Houston TX (713) 882 1624* RCP/M RBBS Peassus Houston TX (                                       |                                  |                                    |                                  |                        |
| RCP/M RBBS Cranford NJ (201) 272 1874* RCP/M RBBS Cranford NJ (201) 272 1874* RCP/M RBBS O1 San Carl CA1\$& (415) 555 0541* RCP/M RBBS 01 San Carl CA1\$& (415) 555 0541* RCP/M RBBS 010 San Jose CA (408) 238 9521* RCP/M RBBS 010 San Jose CA (408) 238 9521* RCP/M RBBS 010 Sannyvale CA (408) 732 9190 RCP/M RBBS EI Paso TX& (915) 598 1668* RCP/M RBBS EI Paso TX& (915) 598 1668* RCP/M RBBS Brist PA Epson! (617) 848 8281 RCP/M RBBS Brist PA Epson! (214) 659 0387 RCP/M RBBS Dal TX Epsonsic)! (214) 659 0387 RCP/M RBBS Dal TX Epsonsic)! (214) 659 0387 RCP/M RBBS Dal TX Epsonsic)! (214) 659 0387 RCP/M RBBS San Fran CA Son! (415) 589 5662 RCP/M RBBS Tor CA Totedo! (213) 618 8674 RCP/M RBBS Tor CA Totedo! (213) 618 8674 RCP/M RBBS Tor CA Totedo! (213) 618 8674 RCP/M RBBS Fairfield CA! (707) 422 7256* RCP/M RBBS Fairfield CA! (707) 422 7256* RCP/M RBBS Fairfield CA! (707) 422 7256* RCP/M RBBS Palos Verdes, CA\$& (714) 534 1547* RCP/M RBBS Cadare Rapids IA (319) 363 3314 RCP/M RBBS Cadar Rapids IA (319) 363 3314 RCP/M RBBS Valley Helena MT (406) 443 2768 RCP/M RBBS Valley Helena MT (406) 443 2768 RCP/M RBBS Walley Helena MT (406) 443 2768 RCP/M RBBS BM-PC Chardo F1-\$& (305) 830 4340* RCP/M RBBS IBM-PC Chardo F1-\$& (303) 983 108* RCP/M RBBS IBM-PC Chardo F1-\$& (303) 983 3733* RCP/M RBBS BM-PC Chardo F1-\$& (304) 973 2374 RCP/M RBBS BM-PC Chardo F1-\$& (305) 830 4340* RCP/M RBBS BM-PC Chardo F1-\$& (305) 830 4340* RCP/M RBBS BM-PC Chardo F1-\$& (305) 830 4340* RCP/M RBBS BM-PC Chardo F1-\$& (305) 830 3733* RCP/M RBBS Lakewood Deriver CO (303) 985 1108* RCP/M RBBS Cadar Rapids IA (415) 461 7726* RCP/M RBBS Cadar NJ& (415) 461 7726* RCP/M RBBS Datardo F1-\$& (305) 651 2330* RCP/M RBBS Datardo F1-\$& (305) 651 2330* RCP/M RBBS Cadar NJ& (212) 477 8705 RCP/M RB                          | RCP/M RBBS Cincinnati OH         | (513) 489 0149-                    | Remote Northstar Vir Bch VA      | (804) 340 5246         |
| RCP/M RBBS Cranford NJ (201) 272 1874* RCP/M RBBS Cranford NJ (201) 272 1874* RCP/M RBBS O1 San Carl CA1\$& (415) 555 0541* RCP/M RBBS 01 San Carl CA1\$& (415) 555 0541* RCP/M RBBS 010 San Jose CA (408) 238 9521* RCP/M RBBS 010 San Jose CA (408) 238 9521* RCP/M RBBS 010 Sannyvale CA (408) 732 9190 RCP/M RBBS EI Paso TX& (915) 598 1668* RCP/M RBBS EI Paso TX& (915) 598 1668* RCP/M RBBS Brist PA Epson! (617) 848 8281 RCP/M RBBS Brist PA Epson! (214) 659 0387 RCP/M RBBS Dal TX Epsonsic)! (214) 659 0387 RCP/M RBBS Dal TX Epsonsic)! (214) 659 0387 RCP/M RBBS Dal TX Epsonsic)! (214) 659 0387 RCP/M RBBS San Fran CA Son! (415) 589 5662 RCP/M RBBS Tor CA Totedo! (213) 618 8674 RCP/M RBBS Tor CA Totedo! (213) 618 8674 RCP/M RBBS Tor CA Totedo! (213) 618 8674 RCP/M RBBS Fairfield CA! (707) 422 7256* RCP/M RBBS Fairfield CA! (707) 422 7256* RCP/M RBBS Fairfield CA! (707) 422 7256* RCP/M RBBS Palos Verdes, CA\$& (714) 534 1547* RCP/M RBBS Cadare Rapids IA (319) 363 3314 RCP/M RBBS Cadar Rapids IA (319) 363 3314 RCP/M RBBS Valley Helena MT (406) 443 2768 RCP/M RBBS Valley Helena MT (406) 443 2768 RCP/M RBBS Walley Helena MT (406) 443 2768 RCP/M RBBS BM-PC Chardo F1-\$& (305) 830 4340* RCP/M RBBS IBM-PC Chardo F1-\$& (303) 983 108* RCP/M RBBS IBM-PC Chardo F1-\$& (303) 983 3733* RCP/M RBBS BM-PC Chardo F1-\$& (304) 973 2374 RCP/M RBBS BM-PC Chardo F1-\$& (305) 830 4340* RCP/M RBBS BM-PC Chardo F1-\$& (305) 830 4340* RCP/M RBBS BM-PC Chardo F1-\$& (305) 830 4340* RCP/M RBBS BM-PC Chardo F1-\$& (305) 830 3733* RCP/M RBBS Lakewood Deriver CO (303) 985 1108* RCP/M RBBS Cadar Rapids IA (415) 461 7726* RCP/M RBBS Cadar NJ& (415) 461 7726* RCP/M RBBS Datardo F1-\$& (305) 651 2330* RCP/M RBBS Datardo F1-\$& (305) 651 2330* RCP/M RBBS Cadar NJ& (212) 477 8705 RCP/M RB                          | RCP/M R8BS Comp Tech El Paso TX  | (915) 533 2202*                    |                                  | • •                    |
| RCP/M RBBS Carlord NJ (201) 272 1874* RCP/M RBBS 001 San Carl CA1\$& (415) 595 0541* RCP/M RBBS 007 San Jose CA (408) 238 9621* RCP/M RBBS 007 San Jose CA (408) 238 9621* RCP/M RBBS EI Paso TX& (915) 598 1668* RCP/M RBBS EI Paso TX& (915) 598 1668* RCP/M RBBS BT MA Epson! (215) 788 5514 RCP/M RBBS BT MA Epson! (215) 788 5514 RCP/M RBBS Brist PA Epson! (215) 788 5514 RCP/M RBBS Brist PA Epson! (215) 788 5514 RCP/M RBBS Palo TX Epsonsic)! (214) 659 0387 RCP/M RBBS Palo TX Epsonsic)! (215) 788 5614 RCP/M RBBS Palo TX Epsonsic)! (214) 659 0387 RCP/M RBBS Palo TX Epsonsic)! (215) 788 5614 RCP/M RBBS Palo TX Epsonsic)! (214) 659 0387 RCP/M RBBS Palo TX Epsonsic)! (215) 618 6674 RCP/M RBBS Palo TX Epsonsic)! (215) 618 6674 RCP/M RBBS TOT CA Toledo! (213) 618 6674 RCP/M RBBS TOT A Toledo! (213) 618 6674 RCP/M RBBS TOT Mill SC (803) 548 0900* RCP/M RBBS Garden Grove, CA\$& (707) 422 7256* RCP/M RBBS Garden Grove, CA\$& (707) 422 7256* RCP/M RBBS Garden Grove, CA\$& (714) 345 1647 RDS Exidy 2000 Hill SC (803) 548 0900* RCP/M RBBS Calor Rapids IA (319) 363 3314 RCP/M RBBS Valley Helena MT (406) 443 2768 RCP/M RBBS Valley Helena MT (406) 443 2768 RCP/M RBBS Valley Helena MT (406) 443 2768 RCP/M RBBS IBM-PC Tulsa OK (918) 749 0718 RCP/M RBBS IBM-PC Tulsa OK (918) 749 0718 RCP/M RBBS IBM-PC Tulsa OK (918) 749 0718 RCP/M RBBS Lateredo Denver CO (303) 983 1108* RCP/M RBBS Lateredo Denver CO (303) 985 1108* RCP/M RBBS Lateredo Denver CO (303) 985 1108* RCP/M RBBS Lateredo Denver CO (303) 985 1108* RCP/M RBBS Dataredo Denver CO (303) 985 1108* RCP/M RBBS Palos Nation County CA (415) 383 0473* RCP/M RBBS Palos Nation Fl.\$ (305) 6571 2530* RCP/M RBBS Palos Nation County CA (415                                  |                                  |                                    | STRACC Micking Rudington VT1     | (802) 882 7023*        |
| RCPM RBBS 007 San Jose CA (408) 238 9621* RCPM RBBS 010 Sumyvale CA (408) 238 9621* RCPM RBBS 010 Sumyvale CA (408) 238 9621* RCPM RBBS 110 Sumyvale CA (408) 732 9190 RCPM RBBS BT MA Epson! (617) 848 8281 RCPM RBBS BT MA Epson! (617) 848 8281 RCPM RBBS BT MA Epson! (215) 788 5614 RCPM RBBS BT STA FA Epson! (215) 788 5614 RCPM RBBS BT TX Epsonstcil (214) 659 0387 RCPM RBBS Plac CA Ambert (714) 632 8332 RCPM RBBS Dai TX Epsonstcil (215) 569 5062 RCPM RBBS TOCA Toledo! (213) 618 8674 RCPM RBBS TOCA Toledo! (213) 618 8674 RCPM RBBS TOCA Toledo! (213) 618 8674 RCPM RBBS Taiffeld CA! (707) 422 7256* RCPM RBBS Faiffeld CA! (707) 422 7256* RCPM RBBS Garden Grove, CA\$& (714) 534 1547* RCPM RBBS Garden Grove, CA\$& (213) 541 2503* RCPM RBBS Valley Helena MT (406) 443 2768 RCPM RBBS Valley Helena MT (406) 443 2768 RCPM RBBS IBM-PC Otando FL\$& (303) 833 3314 RCPM RBBS IBM-PC Otando FL\$& (303) 830 34340* RCPM RBBS IBM-PC Otando FL\$& (303) 830 3732 RCPM RBBS Laurei MD (301) 933 3732 RCPM RBBS Laurei MD (301) 933 3753* RCPM RBBS Marin County CA (415) 383 0473* RCPM RBBS Marin County CA (415) 383 0473* RCPM RBBS Canen NJ& (201) 775 8705 RCPM RBBS Pegasus Houston TX (707) 257 6502* RCPM RBB                                  |                                  |                                    |                                  |                        |
| RCPM RBBS 010 Sunnyvale CA (408) 238 9621* RCPM RBBS 010 Sunnyvale CA (408) 732 9190 RCPM RBBS B1 Sunnyvale CA (408) 732 9190 RCPM RBBS E1 Paso TX& (915) 599 1668* RCPM RBBS B7 MA Epson! (617) 648 8281 RCPM RBBS B7 MA Epson! (215) 788 5614 RCPM RBBS D81 TX Epsonstc)! (214) 659 0387 RCPM RBBS D1 TX Ended! (415) 689 5082 RCPM RBBS TCA CA son! (415) 689 5082 RCPM RBBS TCA Tolsdo! (213) 618 6674 RCPM RBBS TCS Tutsa OK (918) 446 5219 RCPM RBBS Fort Mill SC (803) 548 6900' RCPM RBBS Fort Mill SC (803) 548 6900' RCPM RBBS Garden Grove, CA\$& (714) 534 1547' RCPM RBBS Cadar Rapids IA (319) 363 3314 RCPM RBBS Cadar Rapids IA (319) 363 3314 RCPM RBBS Cadar Rapids IA (319) 363 3314 RCPM RBBS Sulley Helena MT (406) 442 2768 RCPM RBBS IBM-PC Hawthome CA\$ (213) 653 6538° RCPM RBBS IBM-PC Orlando FL\$& (305) 830 4340' RBBS RBBS IBM-PC Orlando FL\$& (305) 830 4340' RBBS B1BM-PC Orlando FL\$& (305) 830 4340' RBBS SIBM-PC Tutsa OK (918) 749 0718 RCPM RBBS Laterend D (301) 953 3753' RCPM RBBS Laterend D (301) 953 3753' RCPM RBBS Laterend CA\$ (213) 677 58705 RCPM RBBS Laterend D (301) 953 3753' RCPM RBBS Laterend D (301) 953 3753' RCPM RBBS Laterend CA\$ (215) 895 6749'tb RCPM RBBS Cadar CA\$ (215) 577 9947' RCPM RBBS Pagasus Houston TX (713) 882 1624' RCPM RBBS Pagasus Houston TX (713) 862 1624' R                               |                                  |                                    | Sign-LDD Campia woulde (4)       | (314) 102 1003         |
| RCP/M RBSS EI Paso TX& 915 598 f668* RCP/M RBSS EI Paso TX& 915 598 f668* RCP/M RBSS Brist PA Epson! (617) 848 8281 RCP/M RBBS Brist PA Epson! (215) 788 5614 RCP/M RBSS Plac CA Amber! (714) 652 8332 RCP/M RBSS Plac CA Amber! (714) 632 8332 RCP/M RBSS San Fran CA son! (415) 589 5062 RCP/M RBSS TOR CA Tolado! (213) 618 8674 RCP/M RBSS TG CA Tolado! (213) 618 8674 RCP/M RBSS TG CA Tolado! (213) 618 8674 RCP/M RBSS Fairfield CA! (707) 422 7256* RCP/M RBSS Fairfield CA! (707) 422 7256* RCP/M RBSS Fairfield CA! (707) 422 7256* RCP/M RBSS Fort Mill SC (803) 548 0900* RCP/M RBSS Fort Mill SC (803) 548 0900* RCP/M RBSS Polse Verdes, CA\$& (714) 634 1547* RCP/M RBSS Polse Verdes, CA\$& (213) 541 2503* RCP/M RBSS Cedar Rapids IA (319) 363 3314 RCP/M RBSS Hollywood CA (213) 633 6398* RCP/M RBSS Hollywood CA (213) 673 6398* RCP/M RBSS IBM-PC Orlando FL\$& (305) 630 4340* RCP/M RBSS IBM-PC Tutisa OK (918) 749 0718 RCP/M RBSS Larkspur CA (415) 383 0473* RCP/M RBSS Larkspur CA (415) 383 0473* RCP/M RBSS Larkspur CA (415) 383 0473* RCP/M RBSS Napa Valley CA (707) 257 6502* RCP/M RBSS Pickerington OH (614) 837 3269                                                                                                                                                                             |                                  |                                    |                                  |                        |
| RCP/M RBBS EI Paso TX& (915) 598 1668° RCP/M RBBS BT MA Epson! (617) 848 8281 RCP/M RBBS Briss PA Epson! (215) 788 5614 RCP/M RBBS Briss PA Epson! (215) 788 5614 RCP/M RBBS Dal TX Epsonstc)! (214) 659 0387 RCP/M RBBS Dal TX Epsonstc)! (214) 659 0387 RCP/M RBBS Dal TX Epsonstc)! (214) 652 0387 RCP/M RBBS San Fran CA sonl (714) 632 8332 RCP/M RBBS San Fran CA sonl (715) 589 5062 RCP/M RBBS Tor CA Toledo! (213) 618 8674 RCP/M RBBS Tor CA Toledo! (213) 618 8674 RCP/M RBBS Fairfield CA! (707) 422 7256* RCP/M RBBS Fairfield CA! (707) 422 7256* RCP/M RBBS Fort Mill SC (803) 548 0900° RCP/M RBBS Polss Verdes, CA\$& (714) 534 1547* RCP/M RBBS Palos Verdes, CA\$& (213) 541 2503° RCP/M RBBS Salley Helena MT (406) 443 2768 RCP/M RBBS Salley Helena MT (406) 443 2768 RCP/M RBBS IBM-PC Orlando FL\$& (305) 830 4340° RCP/M RBBS IBM-PC Orlando FL\$& (305) 830 4340° RCP/M RBBS IBM-PC Tuisa OK (918) 743 543 1108° RCP/M RBBS IBM-PC Tuisa OK (918) 745 549 780 718 RCP/M RBBS Lakewood Denver CO (303) 983 1108° RCP/M RBBS Lakewood Denver CO (303) 983 1108° RCP/M RBBS Lakewood Denver CO (303) 985 1108° RCP/M RBBS Dean NJ & (215) 986 251 1920 RCP/M RBBS Peckerington OH (415) 383 0473° RCP/M RBBS Peckerington OH (415) 383 0473° RC                                   | RCP/M RBBS 007 San Jose CA       | (408) 238 9621*                    | TCBBS Astrocom New York NY1      | (212) 799 4649*        |
| RCP/M RBBS EI Paso TX& (915) 598 1668° RCP/M RBBS BT MA Epson! (617) 848 8281 RCP/M RBBS Briss PA Epson! (215) 788 5614 RCP/M RBBS Briss PA Epson! (215) 788 5614 RCP/M RBBS Dal TX Epsonstc)! (214) 659 0387 RCP/M RBBS Dal TX Epsonstc)! (214) 659 0387 RCP/M RBBS Dal TX Epsonstc)! (214) 652 0387 RCP/M RBBS San Fran CA sonl (714) 632 8332 RCP/M RBBS San Fran CA sonl (715) 589 5062 RCP/M RBBS Tor CA Toledo! (213) 618 8674 RCP/M RBBS Tor CA Toledo! (213) 618 8674 RCP/M RBBS Fairfield CA! (707) 422 7256* RCP/M RBBS Fairfield CA! (707) 422 7256* RCP/M RBBS Fort Mill SC (803) 548 0900° RCP/M RBBS Polss Verdes, CA\$& (714) 534 1547* RCP/M RBBS Palos Verdes, CA\$& (213) 541 2503° RCP/M RBBS Salley Helena MT (406) 443 2768 RCP/M RBBS Salley Helena MT (406) 443 2768 RCP/M RBBS IBM-PC Orlando FL\$& (305) 830 4340° RCP/M RBBS IBM-PC Orlando FL\$& (305) 830 4340° RCP/M RBBS IBM-PC Tuisa OK (918) 743 543 1108° RCP/M RBBS IBM-PC Tuisa OK (918) 745 549 780 718 RCP/M RBBS Lakewood Denver CO (303) 983 1108° RCP/M RBBS Lakewood Denver CO (303) 983 1108° RCP/M RBBS Lakewood Denver CO (303) 985 1108° RCP/M RBBS Dean NJ & (215) 986 251 1920 RCP/M RBBS Peckerington OH (415) 383 0473° RCP/M RBBS Peckerington OH (415) 383 0473° RC                                   | RCP/M R8BS 010 Sunnyvale CA      | (408) 732 9190                     | TCBBS BAMS New York NY           | (212) 362 1040*        |
| RCP/M RBBS BT MA Epson! (617) 848 8281 RCP/M RBBS Brist PA Epson! (215) 788 5614 RCP/M RBBS Dal TX Epsonstc)! (214) 659 0387 RCP/M RBBS Dal TX Epsonstc)! (214) 659 0387 RCP/M RBBS Plac CA Amber! (714) 632 8332 RCP/M RBBS Plac CA Amber! (714) 632 8332 RCP/M RBBS Plac CA Amber! (714) 632 8332 RCP/M RBBS Tor CA Toddo! (213) 618 8674 RCP/M RBBS TO CA Toddo! (213) 618 8674 RCP/M RBBS TOS Tulsa OK (918) 446 5219 RCP/M RBBS Fairfield CA! (707) 422 7256* RCP/M RBBS Fairfield CA! (707) 422 7256* RCP/M RBBS Fairfield CA! (707) 422 7256* RCP/M RBBS Garlen Grove, CA\$8. (213) 548 0900* RCP/M RBBS Palos Verdes, CA\$8. (213) 541 2503* RCP/M RBBS Palos Verdes, CA\$8. (213) 541 2503* RCP/M RBBS Valley Helena MT (406) 443 2768 RCP/M RBBS Valley Helena MT (406) 443 2768 RCP/M RBBS IBM-PC Hawthome CA\$ (213) 635 6398* RCP/M RBBS IBM-PC Tulsa OK (918) 749 0718 RCP/M RBBS IBM-PC Tulsa OK (918) 749 0718 RCP/M RBBS IBM-PC Tulsa OK (918) 749 0718 RCP/M RBBS Larler MD (301) 953 3753* RCP/M RBBS Pasaderna CA\$ (205) 895 6749*rb RCP/M RBBS Pasaderna CA\$ (205) 895                            |                                  |                                    |                                  | (,                     |
| RCPM RBBS Brist PA Épsonl (215) 788 5614 RCPM RBBS Dat TX Epsonstol (214) 659 0387 RCPM RBBS Dat TX Epsonstol (214) 659 0387 RCPM RBBS San Fran CA sonl (415) 589 5062 RCPM RBBS San Fran CA sonl (415) 589 5062 RCPM RBBS TOr CA Tolado! (213) 618 8674 RCPM RBBS TOr CA Tolado! (213) 618 8674 RCPM RBBS Faiffield CA! (707) 422 7256* RCPM RBBS Faiffield CA! (707) 422 7256* RCPM RBBS Faiffield CA! (707) 422 7256* RCPM RBBS Garden Grove, CA\$& (714) 534 1547* RCPM RBBS Garden Grove, CA\$& (714) 534 1547* RCPM RBBS Palos Verdes, CA\$& (213) 541 2503* RCPM RBBS Palos Verdes, CA\$& (213) 541 2503* RCPM RBBS Cedar Rapids IA (319) 363 3314 RCPM RBBS Saley Helena MT (406) 443 2768 RCPM RBBS BM-PC Hawthome CA\$ (213) 653 6398* RCPM RBBS IBM-PC Hawthome CA\$ (213) 633 6398* RCPM RBBS IBM-PC Orlando FL\$& (305) 830 4340* RCPM RBBS IBM-PC Tulsa OK (918) 749 0718 RCPM RBBS IBM-PC Tulsa OK (918) 749 0718 RCPM RBBS Lakewood Denver CO (303) 965 1108* RCPM RBBS Laris MD (301) 953 3753* RCPM RBBS Laris MD (301) 953 970 570 570 570 570 570 570 570 570 570 5                                                                                                                                |                                  |                                    | TAIET Coats Descripe Dismits Mil | (212) 452 51461        |
| RCP/M RBBS Dal TX Epsonstc)! (214) 659 0387 RCP/M RBBS Dal TX Epsonstc)! (214) 659 0387 RCP/M RBBS Plac CA Amber! (714) 632 8332 RCP/M RBBS San Fran CA son! (415) 589 5062 RCP/M RBBS Tor CA Torledo! (213) 618 8674 RCP/M RBBS TOR CA Torledo! (213) 618 8674 RCP/M RBBS TOS Tulsa OK (918) 446 5219 RCP/M RBBS Fort Mill SC (803) 548 0900° RCP/M RBBS Fort Mill SC (803) 548 0900° RCP/M RBBS Garden Grove, CA\$& (714) 534 1547° RCP/M RBBS Garden Grove, CA\$& (213) 541 2503° RCP/M RBBS Cedar Rapids IA (319) 363 3314 RCP/M RBBS Cedar Rapids IA (319) 363 3314 RCP/M RBBS Valley Helena MT (406) 443 2768 RCP/M RBBS BM-PC Driando FL\$& (213) 673 6398° RCP/M RBBS BM-PC Tulsa OK (918) 749 0718 RCP/M RBBS BM-PC Tulsa OK (918) 749 0718 RCP/M RBBS Larkspur CA (415) 461 7726° RCP/M RBBS Larkspur CA (415) 483 0473° RCP/M RBBS Larkspur CA (415) 383 0473° RCP/M RBBS Larkspur CA (415) 461 7726° RCP/M RBBS Drasspur CA (415) 461 7726° RCP/M RBBS Pasadena CA\$ (201) 775 8705 RCP/M RBBS Pasadena CA\$ (213) 577 9947° RCP/M RBBS Pasadena CA\$ (213) 577 9947° RCP/M RBBS Pasadena CA\$ (213) 577 9                                |                                  |                                    |                                  |                        |
| RCP/M RBBS Plac CA Ambert (714) 632 8332 T-NET Twilight Phon Warren Mi1 (313) 775 1649* RCP/M RBBS San Fran CA son! (415) 559 5062 RCP/M RBBS Tor CA Toledo! (213) 618 8674 TBBS Aurora CO1 (303) 690 4566 RCP/M RBBS TCS Tulsa OK (918) 446 5219 TBBS Aurora CO1 (303) 690 4566 RCP/M RBBS Fairfield CA! (707) 422 7256* TBBS Beer City Milwaukee WI& (414) 235 8839* RCP/M RBBS Fort Mill SC (803) 548 9900* TBBS Canopus Milwaukee WI& (414) 281 0545* RCP/M RBBS Palos Verdes, CA\$& (714) 534 1547* TBBS Exidy 2000 Houston TX& (713) 442 7644* RCP/M RBBS Palos Verdes, CA\$& (213) 541 2503* TBBS Freelancin Alvin Houst TX& (713) 331 2599* RCP/M RBBS Valley Helena MT (406) 443 2768 TBBS Freelancin Houston TX& (713) 488 2003* RCP/M RBBS Valley Helena MT (406) 443 2768 TBBS Hawkins TX& (214) 769 3036* RCP/M RBBS IBM-PC Hawthome CA\$ (213) 633 6398* TBBS Hawkins TX& (214) 769 3036* RCP/M RBBS IBM-PC Hawthome CA\$ (213) 973 2374 TBBS Pizza-Net Orlando FL (305) 645 5543* RCP/M RBBS IBM-PC Tulsa OK (918) 749 0718 TBBS Shreveport LA (318) 635 8660* RCP/M RBBS IBM-PC Tulsa OK (918) 749 0718 TBBS Tulsa OK1 (918) 749 0759* RCP/M RBBS Laurel MD (301) 953 3753* RCP/M RBBS Marin County CA (415) 461 7726* TRADE-80 Albany GA (912) 439 7440* RCP/M RBBS Marin County CA (415) 461 7726* TRADE-80 Albany GA (912) 439 7440* RCP/M RBBS Marin County CA (415) 461 7726* TRADE-80 Albany GA (912) 439 7440* RCP/M RBBS Napa Valley CA (707) 257 6502* RCP/M RBBS Napa Valley CA (707) 257 6502* RCP/M RBBS Pasaderia CA\$ (213) 577 9947* RCP/M RBBS Pasaderia CA\$ (213) 577 9947* RCP/M RBBS Pasaderia CA\$ (213) 577 9947* RCP/M RBBS Pickerington OH (614) 837 3269 Adventure BBS Rosiyn NY (516) 621 9296                                                                                                                                                                                                                                                                                                              |                                  |                                    |                                  |                        |
| RCP/M RBBS San Fran CA son! (415) 589 5062 RCP/M RBBS Tor CA Toledo! (213) 618 8674 RCP/M RBBS Tor CA Toledo! (213) 618 8674 RCP/M RBBS Tor CA Toledo! (918) 446 5219 RCP/M RBBS TCS Tulsa OK (918) 446 5219 RCP/M RBBS Fairfield CA! (707) 422 7256* RCP/M RBBS Fairfield CA! (707) 422 7256* RCP/M RBBS Fort Mill SC (803) 548 0900* RCP/M RBBS Fort Mill SC (803) 548 0900* RCP/M RBBS Fort Mill SC (803) 548 0900* RCP/M RBBS Paics Verdes, CA\$& (714) 534 1547* RCP/M RBBS Palos Verdes, CA\$& (213) 541 2503* RCP/M RBBS Palos Verdes, CA\$& (213) 541 2503* RCP/M RBBS Palos Verdes, CA\$& (213) 541 2503* RCP/M RBBS Valley Helena MT (406) 443 2768 RCP/M RBBS Valley Helena MT (406) 443 2768 RCP/M RBBS Valley Helena MT (406) 443 2768 RCP/M RBBS IBM-PC Hawthome CA\$ (213) 653 6598* RCP/M RBBS IBM-PC Hawthome CA\$ (213) 973 2374 RCP/M RBBS IBM-PC Orlando FL\$& (305) 630 4340* RCP/M RBBS IBM-PC Tulsa OK (918) 749 0718 RCP/M RBBS IBM-PC Tulsa OK (918) 749 0718 RCP/M RBBS Lakewood Denver CO (303) 985 1108* RCP/M RBBS Denver CA (415) 461 7726* RCP/M RBBS Coann NJ& (201) 775 8705 RCP/M RBBS Napa Valley CA (707) 257 6502* RCP/M RBBS Pasadena CA\$ (201) 775 8705                      | RCP/M RBBS Dal TX Epsonstc)!     | (214) 659 0387                     | T-NET Special W Bioomfield MI    | (313) 855 6321*        |
| RCP/M RBBS San Fran CA son! (415) 589 5062 RCP/M RBBS Tor CA Toledo! (213) 618 8674 RCP/M RBBS Tor CA Toledo! (213) 618 8674 RCP/M RBBS Tor CA Toledo! (918) 446 5219 RCP/M RBBS TCS Tulsa OK (918) 446 5219 RCP/M RBBS Fairfield CA! (707) 422 7256* RCP/M RBBS Fairfield CA! (707) 422 7256* RCP/M RBBS Fort Mill SC (803) 548 0900* RCP/M RBBS Fort Mill SC (803) 548 0900* RCP/M RBBS Fort Mill SC (803) 548 0900* RCP/M RBBS Paics Verdes, CA\$& (714) 534 1547* RCP/M RBBS Palos Verdes, CA\$& (213) 541 2503* RCP/M RBBS Palos Verdes, CA\$& (213) 541 2503* RCP/M RBBS Palos Verdes, CA\$& (213) 541 2503* RCP/M RBBS Valley Helena MT (406) 443 2768 RCP/M RBBS Valley Helena MT (406) 443 2768 RCP/M RBBS Valley Helena MT (406) 443 2768 RCP/M RBBS IBM-PC Hawthome CA\$ (213) 653 6598* RCP/M RBBS IBM-PC Hawthome CA\$ (213) 973 2374 RCP/M RBBS IBM-PC Orlando FL\$& (305) 630 4340* RCP/M RBBS IBM-PC Tulsa OK (918) 749 0718 RCP/M RBBS IBM-PC Tulsa OK (918) 749 0718 RCP/M RBBS Lakewood Denver CO (303) 985 1108* RCP/M RBBS Denver CA (415) 461 7726* RCP/M RBBS Coann NJ& (201) 775 8705 RCP/M RBBS Napa Valley CA (707) 257 6502* RCP/M RBBS Pasadena CA\$ (201) 775 8705                      | RCP/M RBBS Plac CA Amber!        | (714) 632 8332                     | T-NET Twilicht Phon Warren Mil   | (313) 775 1649*        |
| RCP/M RBBS Tor CA Toledo! (213) 618 8674 RCP/M RBBS TCS Tutsa OK (918) 446 5219 RCP/M RBBS Fairfield CA! (707) 422 7256* RCP/M RBBS Fairfield CA! (707) 422 7256* RCP/M RBBS Fairfield CA! (707) 422 7256* RCP/M RBBS Fort Mill SC (803) 548 0900* RCP/M RBBS Garden Grove, CA\$& (714) 534 1547* RCP/M RBBS Garden Grove, CA\$& (213) 541 2503* RCP/M RBBS Palos Verdes, CA\$& (213) 541 2503* RCP/M RBBS Palos Verdes, CA\$& (213) 541 2503* RCP/M RBBS Valley Helena MT (405) 443 2768 RCP/M RBBS Valley Helena MT (406) 443 2768 RCP/M RBBS Valley Helena MT (405) 443 2768 RCP/M RBBS Hollywood CA (213) 653 6393* RCP/M RBBS IBM-PC Hawthome CA\$ (213) 653 6393* RCP/M RBBS IBM-PC Orlando FL\$& (305) 630 4340* RCP/M RBBS IBM-PC Orlando FL\$& (305) 630 4340* RCP/M RBBS IBM-PC Tutsa OK (918) 749 0718 RCP/M RBBS JUG Jacksom/le FL\$ (904) 725 4995* RCP/M RBBS Larkspur CA (415) 461 7726* RCP/M RBBS Larkspur CA (415) 461 7726* RCP/M RBBS Napla Valley CA (707) 257 6502* RCP/M RBBS Napla Valley CA (707) 257 6502* RCP/M RBBS Napla Valley CA (707) 257 6502* RCP/M RBBS Pegasus Houston TX (713) 862 1624* RCP/M RBBS Pickerington OH (614) 837 3269 RCP/M RBBS Pickerington OH (514) 837 3269 RCP/M RBBS Pickerington OH (514) 837 3269 RCP/M RBBS Pickerington OH (514) 837 3269 RCP/M RBBS Pickerington OH (516) 621 9296                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |                                  |                                    |                                  | (0.0)                  |
| RCP/M RBBS TCS Tulsa OK (918) 446 5219  RCP/M RBBS Fairfield CA! (707) 422 7256* TBBS Austin TX1 (512) 385 1102*  RCP/M RBBS Fairfield CA! (707) 422 7256* TBBS Beer City Milwaukee Wil& (414) 355 8393*  RCP/M RBBS Fort Mili SC (803) 548 0900* TBBS Canopus Milwaukee Wil (414) 281 0545*  RCP/M RBBS Garden Grove, CA\$& (714) 534 1547* TBBS Exidy 2000 Houston TX& (713) 442 7644*  RCP/M RBBS Plas Verdes, CA\$& (213) 541 2503* TBBS Freelancin Alvin Houst TX& (713) 432 7644*  RCP/M RBBS Cedar Rapids IA (319) 363 3314 TBBS Freelancin Houston TX& (713) 488 2003*  RCP/M RBBS Valley Helena MT (406) 443 2768 TBBS Hawkins TX& (214) 769 3036*  RCP/M RBBS Hollywood CA (213) 653 6393* TBBS Noah's Ark Fremont Ca (415) 490 3083*so  RCP/M RBBS IBM-PC Hawthome CA\$ (213) 973 2374 TBBS Pizza-Net Orlando FL (305) 645 5543*  RCP/M RBBS IBM-PC Tulsa OK (918) 749 0718 TBBS Tulsa OK (918) 635 8660*  RCP/M RBBS JUG Jacksonvile FL\$ (904) 725 4995* TBBS TUSA OK1 (918) 649 0059*  RCP/M RBBS Laurel MD (301) 953 3753*  RCP/M RBBS Huntsville AL (205) 895 6749*rb  RCP/M RBBS Napa Valley CA (707) 257 6502*  RCP/M RBBS Ocean NJ& (201) 775 8705  RCP/M RBBS Ocean NJ& (201) 775 8705  RCP/M RBBS Pasadena CA\$ (213) 577 9947*  RCP/M RBBS Pasadena CA\$ (213) 577 9947*  RCP/M RBBS Pickerington OH (614) 837 3269  RCP/M RBBS Pickerington OH (614) 837 3269  RCP/M RBBS Pickerington OH (614) 837 3269                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |                                  |                                    | TDDC Auren CO4                   | (000) 000 4500         |
| RCP/M RBBS Fairfield CA! (707) 422 7256* RCP/M RBBS Fort Mill SC (803) 548 0900* RCP/M RBBS Garden Grove, CA\$& (714) 534 1547* RCP/M RBBS Garden Grove, CA\$& (714) 534 1547* RCP/M RBBS Palos Verdes, CA\$& (213) 541 2503* RCP/M RBBS Palos Verdes, CA\$& (213) 541 2503* RCP/M RBBS Cadar Rapids IA (319) 363 3314 RCP/M RBBS Valley Helena MT (406) 443 2768 RCP/M RBBS Valley Helena MT (406) 443 2768 RCP/M RBBS Hollywood CA (213) 653 6398* RCP/M RBBS IBM-PC Hawthome CA\$ (213) 973 2374 RCP/M RBBS IBM-PC Orlando FL\$& (305) 830 4340* RCP/M RBBS IBM-PC Tulsa OK (918) 749 0718 RCP/M RBBS JUG Jacksonvile FL\$ (904) 725 4995* RCP/M RBBS Lakewood Denver CO (303) 985 1108* RCP/M RBBS Larkspur CA (415) 461 7726* RCP/M RBBS Larkspur CA (415) 461 7726* RCP/M RBBS Marin County CA (415) 383 0473* RCP/M RBBS Napa Valley CA (707) 257 6502* RCP/M RBBS Orlando FL\$& (305) 671 2330* RCP/M RBBS Pegasus Houston TX (713) 882 1624* RCP/M RBBS Pegasus Houston TX (713) 882 1624* RCP/M RBBS Pickerington OH (614) 837 3269  RCP/M RBBS Pickerington OH (614) 837 3269  RCP/M RBBS Pickerington OH (614) 837 3269  RCP/M RBBS Roslyn NY (516) 621 9296                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |                                  |                                    |                                  |                        |
| RCP/M R8BS Fort Mill SC (803) 548 0900° RCP/M R8BS Garden Grove, CA\$& (714) 534 1547° RCP/M R8BS Garden Grove, CA\$& (213) 541 2503° RCP/M R8BS Palos Verdes, CA\$& (213) 541 2503° RCP/M RBBS Palos Verdes, CA\$& (213) 541 2503° RCP/M RBBS Cedar Rapids IA (319) 363 3314 RCP/M RBBS Valley Helena MT (406) 443 2768 RCP/M RBBS Valley Helena MT (406) 443 2768 RCP/M RBBS IBM-PC Hawthome CA\$ (213) 653 6398° RCP/M RBBS IBM-PC Hawthome CA\$ (213) 973 2374 RCP/M RBBS IBM-PC Orlando FL\$& (305) 830 4340° RCP/M RBBS IBM-PC Orlando FL\$& (305) 830 4340° RCP/M RBBS IBM-PC Tulsa OK (918) 749 0718 RCP/M RBBS JUG Jacksonvile FL\$ (904) 725 4995° RCP/M RBBS Lakewood Denver CO (303) 985 1108° RCP/M RBBS Lakewood Denver CO (303) 985 1108° RCP/M RBBS Larrel MD (301) 953 3753° RCP/M RBBS Larrel MD (301) 953 3753° RCP/M RBBS Marin County CA (415) 461 7726° RCP/M RBBS Marin County CA (415) 383 0473° RCP/M RBBS Napa Valley CA (707) 257 6502° RCP/M RBBS Napa Valley CA (707) 257 6502° RCP/M RBBS Pegasus Houston TX (713) 862 1624° RCP/M RBBS Pegasus Houston TX (713) 862 1624° RCP/M RBBS Pickerington OH (614) 837 3269 RCP/M RBBS Rosyn NY (516) 621 9296                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | RCP/M RBBS TCS Tulsa OK          | (918) 446 5219                     | TBBS Austin TX1                  | (512) 385 1102         |
| RCP/M R8BS Fort Mill SC (803) 548 0900° RCP/M R8BS Garden Grove, CA\$& (714) 534 1547° RCP/M R8BS Garden Grove, CA\$& (213) 541 2503° RCP/M R8BS Palos Verdes, CA\$& (213) 541 2503° RCP/M RBBS Palos Verdes, CA\$& (213) 541 2503° RCP/M RBBS Cedar Rapids IA (319) 363 3314 RCP/M RBBS Valley Helena MT (406) 443 2768 RCP/M RBBS Valley Helena MT (406) 443 2768 RCP/M RBBS IBM-PC Hawthome CA\$ (213) 653 6398° RCP/M RBBS IBM-PC Hawthome CA\$ (213) 973 2374 RCP/M RBBS IBM-PC Orlando FL\$& (305) 830 4340° RCP/M RBBS IBM-PC Orlando FL\$& (305) 830 4340° RCP/M RBBS IBM-PC Tulsa OK (918) 749 0718 RCP/M RBBS JUG Jacksonvile FL\$ (904) 725 4995° RCP/M RBBS Lakewood Denver CO (303) 985 1108° RCP/M RBBS Lakewood Denver CO (303) 985 1108° RCP/M RBBS Larrel MD (301) 953 3753° RCP/M RBBS Larrel MD (301) 953 3753° RCP/M RBBS Marin County CA (415) 461 7726° RCP/M RBBS Marin County CA (415) 383 0473° RCP/M RBBS Napa Valley CA (707) 257 6502° RCP/M RBBS Napa Valley CA (707) 257 6502° RCP/M RBBS Pegasus Houston TX (713) 862 1624° RCP/M RBBS Pegasus Houston TX (713) 862 1624° RCP/M RBBS Pickerington OH (614) 837 3269 RCP/M RBBS Rosyn NY (516) 621 9296                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | RCP/M RBBS Fairfield CA!         | (707) 422 7256°                    | TBBS Beer City Milwaukee WI&     | (414) 355 8839*        |
| RCP/M RBBS Garden Grove, CA\$& (714) 534 1547* RCP/M RBBS Palos Verdes, CA\$& (213) 541 2503* RCP/M RBBS Palos Verdes, CA\$& (213) 541 2503* RCP/M RBBS Cedar Rapids IA (319) 363 3314 RCP/M RBBS Valley Helena MT (406) 443 2768 RCP/M RBBS Valley Helena MT (406) 443 2768 RCP/M RBBS Valley Helena MT (406) 443 2768 RCP/M RBBS Hollywood CA (213) 653 6398* RCP/M RBBS IBM-PC Hawthome CA\$ (213) 973 2374 RCP/M RBBS IBM-PC Orlando FL\$& (305) 630 4340* RCP/M RBBS IBM-PC Tulsa OK (918) 749 0718 RCP/M RBBS JUG Jacksonvile FL\$ (904) 725 4995* RCP/M RBBS Lakewood Denver CO (303) 985 1108* RCP/M RBBS Laurel MD (301) 953 3753* RCP/M RBBS Laurel MD (301) 953 3753* RCP/M RBBS Larlspur CA (415) 461 7726* RCP/M RBBS Marin County CA (415) 383 0473* RCP/M RBBS Marin County CA (415) 383 0473* RCP/M RBBS Napa Valley CA (707) 257 6502* RCP/M RBBS Ocean NJ\$ (201) 775 8705 RCP/M RBBS Ocean NJ\$ (201) 775 8705 RCP/M RBBS Pasadena CA\$ (213) 577 9947* RCP/M RBBS Pickerington OH (614) 837 3269                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |                                  |                                    | TBRS Canopus Milwaukee Wi        | (414) 281 0545*        |
| RCP/M RBBS Palos Verdes, CA\$&                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |                                  |                                    |                                  |                        |
| RCP/M RBBS Cedar Rapids IA (319) 363 3314 RCP/M RBBS Valley Helena MT (406) 443 2768 RCP/M RBBS Valley Helena MT (406) 443 2768 RCP/M RBBS Hollywood CA (213) 653 6398° RCP/M RBBS IBM-PC Hawthorne CA\$ (213) 973 2374 RCP/M RBBS IBM-PC Orlando FL\$ (305) 645 5543° RCP/M RBBS IBM-PC Orlando FL\$ (305) 830 4340° RCP/M RBBS IBM-PC Tulsa OK (918) 749 0718 RCP/M RBBS JUG Jacksonvile FL\$ (904) 725 4995° RCP/M RBBS Lakewood Denver CO (303) 985 1108° RCP/M RBBS Lakewood Denver CO (303) 985 1108° RCP/M RBBS Larkspur CA (415) 461 7726° RCP/M RBBS Marin County CA (415) 383 0473° RCP/M RBBS Huntsville AL (205) 895 6749°rb RCP/M RBBS Napa Valley CA (707) 257 6502° RCP/M RBBS Orlando FL\$ (305) 671 2330° RCP/M RBBS Pasadena CA\$ (213) 577 9947° RCP/M RBBS Pasadena CA\$ (213) 577 9947° RCP/M RBBS Pasadena CA\$ (213) 577 9947° RCP/M RBBS Pegasus Houston TX (713) 862 1624° RCP/M RBBS Pickerington OH (614) 837 3269 RCP/M RBBS Roslyn NY (516) 621 9296                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |                                  | (1 17) 557 1571<br>(919) E41 9593* |                                  |                        |
| RCP/M RBBS Valley Helena MT (406) 443 2768 RCP/M RBBS Hollywood CA (213) 653 6398° RCP/M RBBS IBM-PC Hawthorne CA\$ (213) 973 2374 RCP/M RBBS IBM-PC Orlando FL\$& (305) 830 4340° RCP/M RBBS IBM-PC Tuisa OK (918) 749 0718 RCP/M RBBS JUG Jacksonvile FL\$ (904) 725 4995° RCP/M RBBS JUG Jacksonvile FL\$ (904) 725 4995° RCP/M RBBS Laurel MD (301) 953 3753° RCP/M RBBS Laurel MD (301) 953 3753° RCP/M RBBS Laurel MD (301) 953 3753° RCP/M RBBS Marin County CA (415) 483 0473° RCP/M RBBS Huntsville AL (205) 895 6749°to RCP/M RBBS Napa Valley CA (707) 257 6502° RCP/M RBBS Ocean NJ& (201) 775 8705 RCP/M RBBS Pasadena CA\$ (213) 577 9947° RCP/M RBBS Pasadena CA\$ (213) 577 9947° RCP/M RBBS Pegasus Houston TX (713) 862 1624° RCP/M RBBS Pickerington OH (614) 837 3269 RCP/M RBBS Roshyn NY (516) 621 9296                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | nur/m nodo raios verdes, UASA    | (213) 341 2303                     |                                  |                        |
| RCP/M RBBS Hollywood CA (213) 653 6398*  RCP/M RBBS IBM-PC Hawthorne CA\$ (213) 973 2374  RCP/M RBBS IBM-PC Orlando FL\$& (305) 830 4340*  RCP/M RBBS IBM-PC Tulsa OK (918) 749 0718  RCP/M RBBS JUG Jacksonvile FL\$ (904) 725 4995*  RCP/M RBBS Lakewood Denver CO (303) 985 1108*  RCP/M RBBS Laurel MD (301) 953 3753*  RCP/M RBBS Laurel MD (301) 953 3753*  RCP/M RBBS Laurel MD (415) 461 7726*  RCP/M RBBS Marin County CA (415) 461 7726*  RCP/M RBBS Huntsville AL (205) 895 6749*rb  RCP/M RBBS Napa Valley CA (707) 257 6502*  RCP/M RBBS Orlando FL\$& (305) 671 2330*  RCP/M RBBS Pasadena CA\$ (213) 577 9947*  RCP/M RBBS Pegasus Houston TX (713) 862 1624*  RCP/M RBBS Pickerington OH (614) 837 3269  RCP/M RBBS Roshyn NY (516) 621 9296                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |                                  |                                    |                                  |                        |
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| RCP/M RBBS IBM-PC Hawthorne CA\$ (213) 973 2374 RCP/M RBBS IBM-PC Orlando FL\$& (305) 830 4340° RCP/M RBBS IBM-PC Tulsa OK (918) 749 0718 RCP/M RBBS JUG Jacksonvile FL\$ (904) 725 4995° RCP/M RBBS Lakewood Denver CO (303) 985 1108° RCP/M RBBS Laurel MD (301) 953 3753° RCP/M RBBS Laurel MD (301) 953 3753° RCP/M RBBS Larkspur CA (415) 461 7726° RCP/M RBBS Marin County CA (415) 383 0473° RCP/M RBBS Huntsville AL (205) 895 6749°rb RCP/M RBBS Napa Valley CA (707) 257 6502° RCP/M RBBS Orlando FL\$& (305) 671 2330° RCP/M RBBS Pasadena CA\$ (213) 577 9947° RCP/M RBBS Pegasus Houston TX (713) 862 1624° RCP/M RBBS Pickerington OH (614) 837 3269 RCP/M RBBS Roshyn NY (516) 621 9296                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | RCP/M RBBS Hollywood CA          | (213) 653 6398*                    | TBBS Noah's Ark Fremont Ca       | (415) 490 3083°sn      |
| RCP/M RBBS IBM-PC Orlando FL\$& (305) 830 4340° RCP/M RBBS IBM-PC Tulsa OK (918) 749 0718 RCP/M RBBS JUG Jacksonvile FL\$ (904) 725 4995° RCP/M RBBS Lakewood Denver CO (303) 985 1108° RCP/M RBBS Laurel MD (301) 953 3753° RCP/M RBBS Larrel MD (301) 953 3753° RCP/M RBBS Larrel MD (415) 461 7726° RCP/M RBBS Marin County CA (415) 461 7726° RCP/M RBBS Huntsville AL (205) 895 6749°rb RCP/M RBBS Napa Valley CA (707) 257 6502° RCP/M RBBS Ocean NJ& (201) 775 8705 RCP/M RBBS Orlando FL\$& (305) 671 2330° RCP/M RBBS Pasadena CA\$ (213) 577 9947° RCP/M RBBS Pegasus Houston TX (713) 862 1624° RCP/M RBBS Pickerington OH (614) 837 3269 RCP/M RBBS Roslyn NY (212) 896 0519 Adventure BBS Roslyn NY (516) 621 9296                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |                                  |                                    |                                  |                        |
| RCP/M RBBS IBM-PC Tulsa OK (918) 749 0718  RCP/M RBBS JUG Jacksonvile FL\$ (904) 725 4995*  RCP/M RBBS Lakewood Denver CO (303) 985 1108*  RCP/M RBBS Laurel MD (301) 953 3753*  RCP/M RBBS Larkspur CA (415) 461 7726*  RCP/M RBBS Marin County CA (415) 383 0473*  RCP/M RBBS Huntsville AL (205) 895 6749*rb  RCP/M RBBS Napa Valley CA (707) 257 6502*  RCP/M RBBS Ocean NJ& (201) 775 8705  RCP/M RBBS Orlando FL\$& (305) 671 2330*  RCP/M RBBS Pasadena CA\$ (213) 577 9947*  RCP/M RBBS Pegasus Houston TX (713) 862 1624*  RCP/M RBBS Pickerington OH (614) 837 3269  RCP/M RBBS Roslyn NY (212) 896 0519  Adventure BBS Roslyn NY (516) 621 9296                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                                  |                                    |                                  |                        |
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| RCP/M RBBS Lakewood Denver CO (303) 985 1108* TBBS TIE Tulsa OK (918) 438 3363 RCP/M RBBS Laurel MD (301) 953 3753* RCP/M RBBS Larkspur CA (415) 461 7726* TRADE-80 Albany GA (912) 439 7440* RCP/M RBBS Marin County CA (415) 383 0473* TRADE-80 Ft Lauderdale FL1 (305) 525 1192 RCP/M RBBS Huntsville AL (205) 895 6749*rb TRADE-80 Omaha NE (402) 292 6184 RCP/M RBBS Napa Valley CA (707) 257 6502* RCP/M RBBS Orlando FL\$8 (305) 671 2330* RCP/M RBBS Pasadena CA\$ (213) 577 9947* Access-80 Tampa FL (813) 884 1506* RCP/M RBBS Pegasus Houston TX (713) 862 1624* (7) Queens NY (212) 896 0519 RCP/M RBBS Pickerington OH (614) 837 3269 Adventure BBS Roslyn NY (516) 621 9296                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |                                  |                                    |                                  |                        |
| RCP/M RBBS Lakewood Denver CO (303) 985 1108* TBBS TIE Tulsa OK (918) 438 3363 RCP/M RBBS Laurel MD (301) 953 3753* RCP/M RBBS Larkspur CA (415) 461 7726* TRADE-80 Albany GA (912) 439 7440* RCP/M RBBS Marin County CA (415) 383 0473* TRADE-80 Ft Lauderdale FL1 (305) 525 1192 RCP/M RBBS Huntsville AL (205) 895 6749*rb TRADE-80 Omaha NE (402) 292 6184 RCP/M RBBS Napa Valley CA (707) 257 6502* RCP/M RBBS Orlando FL\$8 (305) 671 2330* RCP/M RBBS Pasadena CA\$ (213) 577 9947* Access-80 Tampa FL (813) 884 1506* RCP/M RBBS Pegasus Houston TX (713) 862 1624* (7) Queens NY (212) 896 0519 RCP/M RBBS Pickerington OH (614) 837 3269 Adventure BBS Roslyn NY (516) 621 9296                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | RCP/M RBBS JUG Jacksonville FL\$ | (904) 725 4995*                    |                                  |                        |
| RCP/M RBBS Laurel MD                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |                                  |                                    |                                  |                        |
| RCP/M RBBS Larkspur CA                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |                                  |                                    |                                  | 12.21 .00 0000         |
| RCP/M RBBS Marin County CA                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                                  |                                    | TDADE OG Alberti CA              | 1040\ 400 74404        |
| RCP/M RBBS Huntsville AL (205) 895 6749°rb RCP/M RBBS Napa Valley CA (707) 257 6502° RCP/M RBBS Ocean NJ& (201) 775 8705 RCP/M RBBS Orlando FL\$& (305) 671 2330° RCP/M RBBS Pasadena CA\$ (213) 577 9947° RCP/M RBBS Pegasus Houston TX (713) 862 1624° RCP/M RBBS Pickerington OH (614) 837 3269  RCP/M RBBS Roslyn NY (516) 621 9296                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                                  |                                    | THAUE-80 Albany GA               | (912) 439 7440*        |
| RCP/M RBBS Huntsville AL (205) 895 6749°rb RCP/M RBBS Napa Valley CA (707) 257 6502° RCP/M RBBS Ocean NJ& (201) 775 8705 RCP/M RBBS Orlando FL\$& (305) 671 2330° RCP/M RBBS Pasadena CA\$ (213) 577 9947° RCP/M RBBS Pegasus Houston TX (713) 862 1624° RCP/M RBBS Pickerington OH (614) 837 3269  RCP/M RBBS Roslyn NY (516) 621 9296                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | RCP/M RBBS Marin County CA       | (415) 383 0473°                    |                                  |                        |
| RCP/M RBBS Napa Valley CA                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | RCP/M RBBS Huntsville AL         | (205) 895 6749°rb                  |                                  |                        |
| RCP/M RBBS Ocean NJ8                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | RCP/M RBBS Nana Valley CA        | (707) 257 6502*                    | •                                |                        |
| RCP/M RBBS Orlando FL\$8                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | DCDAI DDDC Canan M 19            | (201) 775 P705                     | MOSPIL HIBOUR CO. MANAGEMA       | ~~~<br>^\/^*E+ ^ = ^~~ |
| RCP/M RBBS Pasadena CA\$       (213) 577 9947*       Access-80 Tampa FL       (813) 884 1506*         RCP/M RBBS Pegasus Houston TX       (713) 862 1624*       (7) Queens NY       (212) 896 0519         RCP/M RBBS Pickerington OH       (614) 837 3269       Adventure BBS Roslyn NY       (516) 621 9296                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | DODAL DODO O La L. C. C.         | (EU1) 110 01V0                     | MISCELLANEOUS OR UNKNOWN         | SYSTEM TYPES           |
| RCP/M RBBS Pegasus Houston TX (713) 862 1624° (7) Queens NY (212) 896 0519 RCP/M RBBS Pickerington OH (614) 837 3269 Adventure BBS Roslyn NY (516) 621 9296                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | HUP/M RBBS Offando FL\$&         | (305) 6/1 2330"                    | <del></del>                      | <del></del>            |
| RCP/M RBBS Pegasus Houston TX (713) 862 1624° (7) Queens NY                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |                                  |                                    | Access-80 Tampa FL               | (813) 884 1506°        |
| RCP/M RBBS Pickerington OH (614) 837 3269 Adventure BBS Roslyn NY                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |                                  |                                    | (2) Ousens NY                    | (212) 806 0510         |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | RCP/M BRRS Pickerington OH       | (614) 837 3269                     | Advantus DDC Danker MV           | (E16) 000 W13          |
| ПОЕ/М ПОВО РІССІВІ МІ. VIBW ОЛ (413) 969 0512°                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | DCDALDDC Diseast M Man CA        | (A15) OSS A007                     | ALVERRUSE DES MOSIVII NY         | (210) 021 9296         |
| • • • • • • • • • • • • • • • • • • • •                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | NUT/M RODO FICOREI MIL VIEW UA   | ופטף פטפ (טוד)                     | AIPNA CLABCUOO PWTRYFT!          | . (813) 969 0512°      |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |                                  | •                                  |                                  |                        |

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| Big Top System Milwaukee WI     | (401) 272 1130<br>(414) 250 0475    | NBBS Norfolk VA                 | (804) 444 3392    |
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| Bradley Computer BBS Tampa FL   | (013) 734 7103                      | NWLAIBMPCUG Shreveport LA       | (318) 688 7078    |
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#### A REVIEW OF TURBO PASCAL

#### by Tony Antonucci

I, for one, was very glad to see software houses begin to produce, high quality at a low cost, software. If they could make the price low enough, people would buy it rather than steal it. Sounds good to me! One of the first such software packages was JRT Pascal. At \$29.95 it was a fair compiler at a very low price.

Well now there is even a better compiler for CP/M which doesn't cost that much more. TURBO PASCAL by BORLAND INT. at \$49.95 (Ad on page 456 of Dec. 1983 BYTE).

When TURBO PASCAL came via UPS, I opened it expecting to find the usual three ring binder and a disk with "fair at best" software. I was wrong. TURBO PASCAL comes with a very complete reference manual (254 pages worth) in a bound book format.

The compiler produces object code and will run on any Apple with a Z-80 card. Unlike JRT or even Apple Pascal, it produces an intermediate file that must be used with a run-time support file. TURBO can produce .COM files ready for execution, without any other files needed.

What is comes with: TURBO PASCAL comes with the compiler, a built in Wordstar compatible editor, an install program and a sample program (a spread sheet program). The compiler: It edits and compiles in memory so it is very fast. Most compilations, that I have done, take 1-3 seconds, yes seconds, not minutes! If and error is found you only have to press ESC and you're in the editor at the point of the error!. NOTE: the editor and compiler are together in one 28K program. After you have compiled and run your program (all from inside TURBO PASCAL), and have it debugged, just change one compiler option and save it to disk as a .COM file.

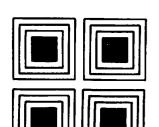
The editor: One very nice feature of TURBO PASCAL is that it comes with a built in editor. For any one using Wordstar the editor is command compatible. Also with the install program provided you could change any command to whatever key sequence you might want (give it compatiblility with your favorite editor if you like). The TURBO PASCAL editor is so good that I would even recommend it to someone just looking for a good CP/M text editor at a a low price....with a Pascal compiler thrown in for free! The built in editor gives TURBO PASCAL an interactive feel. Just use the editor to write or modify a program, exit the editor and compile it, then back to the source to change something and then recompile it all within one program, without disk access! Very large programs, that wouldn't fit in memory all at once, can easily be chained together.

The install program: This program lets you install any changes that you would like to make in the editor's commands setup or in the screen display, which can be configured to any terminal combination.

As for speed, most CP/M Pascal compilers produce 8080 code that will run on any 8080, 8085 or Z80 CP/M system. Thus it should be possible to have source code compatibility between machines running any of these processors.

Well if it sounds like I enjoy TURBO PASCAL, it's because I do. I feel that it is one to the best Pascal compilers on the market, has a good built in editor and at only \$49.95 you almost can't go wrong.





Telex CONSOF 181149 West LSA



11223 SOUTH HINDRY AVENUE, LOS ANGELES, CALIFORNIA 90045

(213) 410-9466

A Division of Arrays, Inc.

February 25th, 1984

NIAUG 1274 W. Dunder Rd. Buffalo Grove IL 60090

Dear Sirs.

The Book Company, publishers of The Book of Apple Software and other bestselling software review books, is now working towards the publication of The Book of Apple Software: Macintosh and Lisa.

As you know, The Book of Apple Software is the standard reference for vendors and consumers of Apple software. Beginning in the fall of 1984, we will produce two volumes, one devoted to the Apple II family and the other to the Macintosh and Lisa. The Book will provide detailed descriptions and analyses of programs, not merely directory listings.

Reviews will be compiled in the areas of games and entertainment, business, education, graphics, telecommunications, and utilities.

Is there anyone within your group who would like to become a reviewer and receive free software as their compensation? If so, please have them send us a letter telling us what machine they have (Macintosh, Lisa, or both), what extra hardware they have at their disposal, and what type of printer they use. Also we need know their interests: entertainment, business, graphics, telecommunications, or utilities. Lastly, it would help us a great deal if they could send us a sample review of any program they choose.

Please address letters to Review Department.

Thank you,

The Book Company

#### DOS COMMANDS (Applesoft-Integer)

CATALOG:

displays volume number, names of the files on

the disk, file types, file sizes in sectors, and which

files are locked.

SAVE RECTANGLE: Saves present program in memory called "RECTANGLE"

on the disk.

LOAD RECTANGLE: loads the program from disk into memory.

RUN RECTANGLE:

copies the program called "RECTANGLE" from the disk into

memory and executes it.

DELETE RECTANGLE: removes your program called "RECTANGLE" from the disk.

LOCK RECTANGLE: protects a file from being deleted or written to.

locked file is indicated by an asterisk (\*) in its disk

catalog.

UNLOCK RECTANGLE:

unlocks your program "RECTANGLE". You are now able

to delete or write to your program.

RENAME RECTANGLE, SQUARE: changes the name of your program "RECTANGLE" to "SQUARE".

#### EDITING COMMANDS

LIST:

displays your program that is presently in memory.

(Remember, it will not execute your program.)

LIST 4:

only line number 4 will be listed.

LIST 4.7

lines 4 through 7 will be listed.

DEL 5.7

deletes lines 5 through 7, Type LIST. Have you deleted

lines 5 through 7?

35

An easy way to delete a program line is simply to type

the line number and press RETURN.

RUN:

Once you are satisfied with your listing, type RUN.

computer will execute your program starting with lowest

numbered statement.

RUN 40:

The computer will execute your program starting with line

Any variables you have assigned before

line 40, your program will not have access to.

Example:

20 Let A = 5

40 PRINT A

RUN 40

(A zero will be displayed on

screen)



## northern illinois apple users group

1271 West Dundee Road, Buffalo Grove, IL.

#### MEMBERSHIP APPLICATION

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#### APRIL PLANNING MEETING MINUTES

by Ken Rentfleish
Tuesday April 17 found Seven club members
at Computervision for the monthly
planning meeting. With cans of soda in
hand they began the meeting at 7:15 P.M.

The first item of business was discussion of a pair of prescription sun glasses that had been found at the meeting. No one seemed to know who the owner is. If you lost them give a call to one of the officers and we'll point you in the right direction to retrieve them.

The secretary (thats me) proclaimed a historical event that hopefully will help with general club efficiency. The event was the arrival of the new club database. are now equipped with a powerful database known as "The General Manager" by Sierra On-Line Inc. I don't promise miracles because this tool is new to me and it takes a bit of learning to use it properly. I'll let everyone know what find as I make progress with it. Comments were made about my purging the existing file of all 1983 non renewed members. As successfully this date I have completed that task. We currently have members on the 1984 file. I would like to personally thank both Rich McNeil and Terry Tufts who were kind enough to loan me a copy of General Manager and Versa Form respectively to use for a time in order to assist in making my decision. Attendance was 135 persons at the last meeting.

Next on the agenda our treasurer reported that all interest on all overdue taxes have been paid and we are currently in the process of asking the I.R.S. to abate any penalties associated with this late payment. Due to the way the laws are written, we as a group, do not qualify for a tax exempt status. We are a non-profit organization but non-profit does not mean tax exempt. We will let you know more as this progresses.

Terry Tufts informs us that 4,000 packets are being printed for handout at the up-coming Userfest and as new member handouts. Chris Otis reported that there

were charges of \$800.00 for preliminary work such as electrical hookups, things being moved around and other typical union requirements. If we realize only 42 members from this fest we will have covered our booth expences.

Jim Glore mentioned that there will need to be an officer on hand for the opening of the show each day to ensure that all is in order in our booth. We will also need someone with a van or truck to assist in hauling some items to and from the show. There will be two types of passes issued for volunteers of the fest. The first will allow the wearer access at any time prior to or after the show times. The second will restrict it's wearer to show hours only.

Guy Lyle stated that slides of the beginner SIGs on April 26th and May 2nd will be taken for display at our booth, so---smile pretty.

Both of the printers from the answering service are now connected, but in general, the service we have received thus far is somewhat less than we were told it would be. This will be discussed at the next meeting and possibly a decision made as to future plans.

Joe Zeinz stated that we sold about 273 disks at the last meeting. For those of you who have been asking, Joe also reported that the disk indexes are being printed. The library SIG may sponsor and run the program contest this year. We have some dedicated people in the SIG and we know they will do a super job.

Terry Tufts and Jim Glore reported that complementary copies of the Harvest, with a letter of thanks, went out to all the participating dealerships who were kind enough to contribute a prize to the program contest last year. These are the people who help make our group interesting and fun. Keep them in mind when you are thinking of buying software or hardware.

Jim Murphy is currently attempting to master the new Star printer purchased recently, along with a Pkaso card. It

should enable us to print the group logo on labels or correspondance.

Rob Stewart is still hard at work putting together a set of by-laws for the U.G. and plans to discussing these at the next planning meeting. As these by-laws directly involve all of us and the way the group operates it might be a good idea if everyone plans to attend the next meeting and find out what is happening.

A recent note from a prior member and SIG chairman sparked conversation with the thought that it is difficult to run a SIG with only a few seasoned users and the rest, rank beginners. One of the ideas was to encourage paid classes for these rank beginners prior to their joining a SIG . This would help them feel a bit comfortable and give them the knowledge needed to contribute on a level closer to that of the chairperson. Joe Zeinz noted the need for a one-on-one type of tutoring possibly in groups of say 3-6. Some topics could be:

- 1 Pascal
- 2 Visicalc
- 3 Applewriter II
- 4 Basic
- 5 Databases

There would be a charge for materials and the instructors time. Other clubs promote this approach and usually allow the instructor to structure the class his own way. These classes could be an outshoot of the beginners SIG. We will attempt to determine if there is a need, and see exactly how other groups have handled the task. Have an opinion on this? We're listening and anxious to hear what you think.

It was discussed that Washington Apple Pi holds get togethers (small groups) just as a sort of "rap session" with Apple computers as a common interest. This would seem to provide a friendly mix of all people regardless of their experience level on the Apple. Ideas ?????

Now for the new business.

vote was taken on the current of membership fees. After each officer was a brief say, it was decided unanimously to retain the fee at \$24.00 and to re-assess this in the future. There will, also be an Associate membership of \$18.00 and a newsletter only fee of \$12.00 for persons holding an exhisting membership. This latter fee will respond to those people who asked for this of service so that type additional members in a household can have their own Harvest. You see, we're listening, keep talking to us.

We are currently working on a new system to inform all members when their particular renewal is due. This will be similar to the procedure that most publications use today. This will spread the load of renewals over the entire year as opposed to the December turnover we have now.

would like to express a special "Thanks" to Mr. Jim Farrington for his assistance in analyzing compiling the comments we all made on our applications this year. I just did not have the time to do this job and spend any time at all with my family. I called Rich McNeil who presented me with a list of volunteers. Jim was my first choice on the list. I didn't know why then but I do now. Jim was enthusiastic and eager to do the task. Little did I know that he would format it so well. I believe Jim truly enjoyed doing the task, or at least that the impression he gave when he returned the finished product to me. I have no idea when I would have gotten to this job but thanks to Jim the officers can respond quickly to a hefty list of. comments, questions and suggestions. You Jim. With people like you helping out, NIAUG can't help but grow in every positive direction. Keep an eye on the Harvest and an ear open at the meetings as the executive answers your questions.

After a brief discussion of tentative meeting dates for June, July and August the meeting adjourned at 10:10 P.M..

#### INTERESTING BITS

#### by Chris Tufts

Associated Technology has conducted an industry survey that identifies over fifty major software locator services citing over 300,000 software packages and representing over 8,000 companies. The survey was conducted to provide a comprehensive guide for beginning a software search. The survey results are available to both buyers and sellers of software for \$8.50 from ATC Software, RT2, Box 448, Estill Springs, TN 37330.

Allied Research Corp. has unveiled a new detachable keyboard designed to offer easy operation and increased capability to Apple II and II+ Users. It is called the Data Spec Detached Extension Keyboard and is priced at \$299.95. The keyboard has a full ASCII character set with uppercase and lower characters. It also has 97 programmed functions and commands, 20 of which are located on a separate keypad. The keyboard comes with a ten-foot cable to allow freedom of movement to the user.

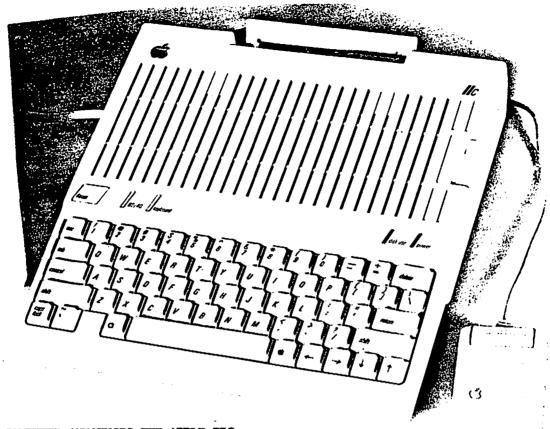
Apple Computer Inc. has introduced a mouse-controlled graphics package for the Apple II computer. The \$149 AppleMouse package includes a mouse, similar to those used with Macintosh and Lisa, and a MousePaint software program from the MacPaint graphics software for Macintosh. It is available for any Aplle II computer. Also Apple is offering a "software developers tool-kit" that allows developers to incorporate the mouse in future Apple II applications. A similar program is under development for the Apple III and III+.

Davong Systems Inc has brought out a line of add-on Winchester disk subsystems for The Macintosh. The drive subsystems will be available in May through Davong's network of more than 1100 retail outlets. The 5-Mbyte drive is expected to sell for \$1995, with a 32-Mbyte model available for \$3995. The 10-Mbyte system will be priced at around \$2200 to \$2400. The drive subsystems are connected to Macintosh through one of the two RS422 serial ports. Also, in the third quarter of this year, Davong plans to introduce a streaming tape backup system and a local-area network for the Macintosh.

Textprint Inc., a supplier of image-enhancement modules, has introduced a printer-interface card for the Apple II and IIe that can work with both serial and parallel printers. List-priced at \$149.95, the product—called Print-It! model 2—is said to be compatible with more than thirty popular printer models. The suggested retail price includes a handbook and an appropriate cable, either parallel or serial.

In a dramatic price-cutting move, VisiCorp has slashed the price of its Visi On applications manager program from \$495 to \$95. Visi On, the firm's "integrated operating environment" for personal computers, allows users to display information from different programs on the computer screen, and to transfer data between programs. It is hoped that the price drop will spur sales of Visi On's applications programs.

A survey from Sofsearch International quantifying packaged computer software products available for seven micro-computer system groups, revealed Apple has the largest overall software base(6,428 identified products). Second was the 5047 avaiable for the Tandy TRS-80 and third was the 4111 on the market for IBM systems.



#### APPLE COMPUTER ANNOUNCES THE APPLE IIC

Apple Computer amnounce it long awaited Apple IIc computer. It is a miniaturized version of the IIe weighing only 7.5 pounds and priced at \$1295. This price includes 128K of RAM, 5.5 inch/140K built in disk drive, a dual mode video output supporting 40- and 80- column formats; six interactive tutorial disks; two serial ports and connectors for a mouse and a monitor. The system can drive monochrome or color monitors, a liquid crystal display or a television. The IIc has no expansion slots for additional boards, all additions to the system are done through connectors.

Other options include and external disk drive for \$329, a carrying case and monitor stand at \$39 each, a mouse and Mousepaint graphics package for \$99 and a thermal transfer printer for \$299.

#### APPLE REALIGNS PRICES

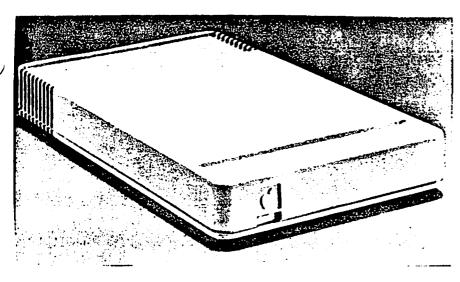
The suggested price for the entry level IIe is \$995 which includes 64k of RAM, a floppy disk drive and controller. The \$1795 system includes a monitor, a duo disk drive and 80 column card. The \$2995 package includes the Profile hard disk system.

Apple expects to have shipped 50,000 IIc's by the end of May.

### APPLE SURPASSES GOALS FOR MACINTOSH'S

Apple announced that it had met its sales goals of 50,000 units installed by the first 100 days. They announced that they have 70,000 units installed and that the 50,000 unit goal was met in 74 days. It took the Apple II more than two years and the IBM PC eight months to achieve the same results.

They said they could have sold between 200,000 and 300,000 Macs if the factory could have produced them. While the factory is designed to produce a machine every 27 seconds, they have not been able to meet this goal. They expect to be producing 40,000 computers a month using double shifts by this summer.



#### COMING EVENTS in CHICAGO

#### JUNE 19-21

COMPUTERIZED OFFICE EQUIPMENT EXPO. A 3 day office information systems conference to be held at the O'Hare Exposition Center, Rosemont, Illinois. Exhibits only-free with coupon, conference \$120/day, \$160/2 day, \$190/3 day. For more information call 312-299-9311.

#### JUNE 25-26

STRUCTURED DOCUMENTATION. A 2 day course sponsored by The American Institute for Professional Education. Fee \$595. For more information call 201-377-7400.

#### JUNE 12-14

ADVANCED MANUFACTURING SYSTEMS EXPOSITION & CONFERENCE. A 4 day conference to be held at Mc Cormick Place, Chicago, Il. Exhibits \$10 at door, conference \$295/3 days, \$150/1 day. For more information call 212-370-1100.

#### MAY 30-31

HEWLETT PACKARD'S PRODUCTIVITY '84 THE COMPUTER SOLUTIONS SEMINARS. A 2 day series of computer presentations, to be held at Hyatt Regency Hotel, Chicago given free of charge to approved preregistrants. For more information call 800-554-4466.

#### JUNE 6.

ELECTRONIC MAIL SYUSTEMS & INTERCAMPUS COMPUTER NETWORKS. A one day seminar on electronic mail systems to be held at the Ramada- The O'Hare Inn, Rosemont, Il. Registration \$250, \$195 for Educom members. For more information call 609-734-1549.

#### APPLE TO OFFER PRIVATE-LABEL MODEMS

Apple Computer Inc. will sell private label modems and communications software along with its computers. Apple has signed an agreement with US Robotics, Chicago, to market both 300 and 1200 baud asynchronous modems priced at \$225 and \$495 respectively with AppleTerm communications software.

The units require 64K of memory and are compatible with the commands of the DC Hayes Smartmodems.

Both units provide built in auto-dial and auto answer functions so an unattended Apple computer can automatically initiate or receive data transmission. The software is menu driven and allows the use of electronic subscription databases but does not provide sophisticated file-transfer and electronic-mail applications.

#### NEW SIGS FORMING

The NIAUG Executive intends to support all Apple models to the limit of its ability. Anyone wishing to start a Lisa SIG, or Apple III SIG talk to any one of the club officers.

#### MACINTOSH SIG

Any one wishing to join a Macintosh SIG please contact Andrii (Andrea) Neczwid, 398-3215, 6:00-9:00 PM.

#### SIG BITS AND BYTES by Ken Falter

#### BUSINESS SIG

Meets on the fourth Saturday of every month at 10:00 a.m. at:

Mount Prospect Public Library 10 South Emerson Street Mount Prospect, Illinois

(One block east of the intersection of Elmhurst (rte. 83) and Central Roads.)

The May meeting of the SIG is cancelled as May 26 is on the Memorial Day weekend. Watch this column next month for information about the June 23 meeting.

The April 28 meeting was INVESTORS DAY. Bradshaw presented investor type spreadsheets for the VISICALC CORNER. In addition, the NIBBLE INVESTOR presented. This program originally appeared in Nibble, volume 4, no. 2, Many enhancements have appeared in Nibble since then. Several members who used the program brought their of the program, with enhancements that they had implemented or designed, and a lively discussion ensued.

#### EDUCATION/GRAPHICS SIG

The SIG is reaching the end of a super Because Ann Baldridge and Phyllis Geren have had such a good time with the SIG and have gotten to know a group of really neat people, they've decided to make the May meeting a special one. The SIG will celebrate the end of the school year with a dinner party on Tuesday, May at Mother Tucker's Restaurant in Schaumburg. It's known for great prime rib and steaks -- and one of the best salad bars around. This pay-your-own-way party and spouses are invited. If you would like to come, please call Bernice Gliege (it was her idea) at 312/991-3250 or Ann Baldridge at 312/893-5468 by Friday, May 11. This is necessary in order to reserve enough seats at the restaurant (or to see if any changes in plans have occurred).

#### -- Thanks to Ann Baldridge for the above--

It seems that Ann Baldridge and Phyllis Geren are "tapped out" as Chairpersons of the SIG and will be pursuing new interests in the Fall. Thus, the chairmanship of the Education/Graphics SIG will be open. Anyone interested in helping lead the SIG into the new school year in the Fall should contact one of the NIAUG Officers (see the inside front cover of the Harvest).

#### LIBRARY SIG

Meets on the first Thursday of the month at 7:30 p.m.

The next meeting will be on May 10 (due to a conflict with the Userfest) at 313 N. Quentin Road, Palatine. The June meeting is tentatively scheduled for June 7. Call Joe Zeinz at 312/526-0575 for additional information.

The Library SIG has been meeting for several months under the leadership of Joe Zeinz, the club Librarian. The aims of the SIG are:

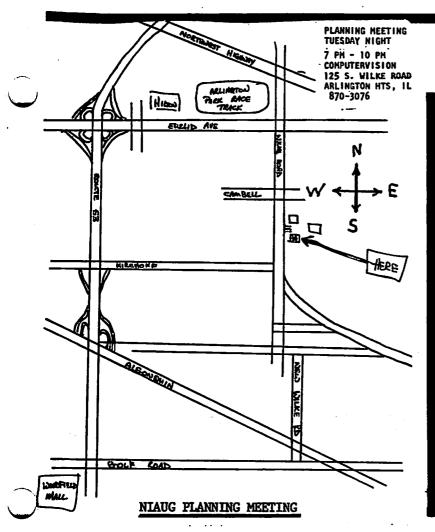
- a) to review disks from other clubs
- b) to consider improvements/changes in the library index
- c) to develop means to make the paper library more available to the club's members
- d) to make the Library more useful to the membership
- e) to establish a Library staff and methods and procedures for handling the library.

#### BEGINNERS SIG

This SIG, coordinated by Guy Lyle, is oriented towards helping "new" Apple users and/or owners handle the questions and difficulties that arise in using their computers. Based on demand, one or more small groups (of 6 - 12 people) will

be formed. Meetings, held monthly or bi-monthly, are relatively unstructured allowing the attendees to give direction to the subjects discussed. One or two "experienced" NIAUG members will be available to answer questions, lead discussions and assist the beginners.

Two groups are currently meeting. "Beginners" wishing to join the SIG should call Guy Lyle at 312/359-1458. \*\*\*NOTE: NIAUG membership is required.\*\*\*



## CLUB NEWS

NIAUG JUNE AGENDA

JUNE 2, 1984

To be held in Building A Harper College 10:00-10:30 am Opening Remarks/Club Business (Rob Stewart) 10:30-12:45 pm Apples In The Corner Apples in the Corner consists of various club members who will demonstrate their computers with typical applications that they use at home. Some of these will be: graphics homebrew hardware, disk repair, communications, speech synthesis and

12:45- 1:00 pm Mr. Apple/Closing
Remarks
(Rob Stewart)

other mind boggling acts to numerous to mention.

#### ADVERTISING

All members of NIAUG may advertise free of charge, in the form of unclassified ads, as long as the ad is not part of a commercial endeavor.

NIAUG Members may also advertise commercial ventures using an unclassified ad 1/2 page wide format at \$3/issue/five line increment or use the regular box ads at the commercial rates.

#### COMMERCIAL ADVERTISING-

All ads must be prepaid and camera ready to the prescribed size as follows:

Full page -7 1/2" wide X 10" high= \$55/issue
Half page -3 1/2" wide X 10" high= \$30/issue
Half page -7 1/2" wide X 4 3/4" high=\$30/issue
Quarter page-3 1/2" wide X 4 3/4" high=\$16/issue
Eighth page -3 1/2" wide X 2 1/4" high=\$9/issue

All ads must be received by the copy deadline for the given issue.

#### COMING MONTHS MEETING DATES

JULY 14-DOS Symposium, AUG 4-Sig Meetings, Dates are firm, topics being arranged.

#### 1984 SCHEDULE FOR THE NIAUG HARVEST

| ISSUE<br>MONTH                           | DEADLINE FOR ARTICLES/ADVERTISING            |
|------------------------------------------|----------------------------------------------|
| JULY<br>AUG<br>SEPT<br>OCT<br>NOV<br>DEC | MAY 15 JUNE 12 JULY 17 AUG 14 SEPT 11 OCT 16 |

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